OVERSIGHT HEARING ON THE FUTURE WATER NEEDS OF CALIFORNIA UNDER CALFED, CALFED FINANCING, THE MONITORING AND PERFORMANCE STANDARDS OF CALFED, AND CALFED PUBLIC PARTICIPATION

OVERSIGHT HEARING

before the

SUBCOMMITTEE ON WATER AND POWER

of the

COMMITTEE ON RESOURCES HOUSE OF REPRESENTATIVES

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OVERSIGHT HEARING ON THE FUTURE WATER NEEDS OF CALIFORNIA UNDER CALFED, CALFED FINANCING, THE MONITORING AND PERFORMANCE STANDARDS OF CALFED, AND CALFED PUBLIC PARTICIPATION

TUESDAY, MAY 12, 1998

House of Representatives, Subcommittee on Water and Power Resources, Committee on Resources, Washington, DC.

The Subcommittee met, pursuant to notice, at 2:30 p.m., in room 1334, Longworth House Office Building, Hon. John T. Doolittle (chairman of the Subcommittee) presiding.

STATEMENT OF HON. JOHN T. DOOLITTLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. DOOLITTLE. The Subcommittee on Water and Power will come to order.

The Subcommittee is meeting today to hear testimony on future water needs of California, CALFED Financing, CALFED public participation, and the monitoring and performance standards of CALFED.

We are gathered here today to have further oversight over the CALFED Program. Last year, we held an oversight hearing concerning this program with emphasis on the fiscal year 1998 Federal Funding Request. Since that hearing, the Subcommittee has been monitoring the program and seeking answers to questions raised at last year's hearing. Even though we are into yet another year of budget requests, the information we have requested has been slowly materializing. We hope this hearing will accelerate the receiving of those answers.

Our questions are focused, today, on four central concepts associated with the CALFED Program: water supply, financing, evaluation of progress, and public participation. Witnesses at the hearing are expected to provide current information regarding these areas. To develop the issues more clearly, witnesses have been selected for our floor panels to address the following basic questions: one, has CALFED expanded or reduced the options available to meet future California water needs? Specifically, how are going to use the CALFED process to meet the future California urban, rural, agricultural, and environmental water needs? Has the CALFED prejudged or eliminated some water planning options? For example, on-stream storage, water reuse, water transfer, et cetera.

These issues must be addressed, immediately, for two reasons, First, the demand for water in California already exceeds water supply during drought years, and second, according to CALFED own documents and the California Department of Water Resources, by the year 2020, California will have a 3-million up to a 7-million-acre-foot-per-year shortage. If the CALFED Program does not immediately begin to address these needs through quantifiable means including on-stream storage, we will lose the valuable time necessary to prepare for this need. I'm interested in each of the members first panel providing the Subcommittee with their level of commitment regarding expanded water supplies.

Two, how does CALFED propose to pay for California's expanding water needs. Interim fundings for the common elements in the CALFED Program is being provided by Federal

appropriations and California water bonds. Are the long-term solutions going to be funded by public interest groups, beneficiaries, or government financing? Also, are CALFED costs going to be borne by local communities through unintended program consequences?

In addressing these questions, I would like the second panel to provide its opinion regarding benefit-based financing. Which benefits should be paid for by public money versus user money? Should some groups' contributions be reduced based on their members limited ability to pay? And should contributing stakeholders group be credited for payments they have already made to CALFED or to other ecosystem restoration programs operating within the region.

Three, after spending hundreds of millions of dollars how does CALFED propose to determine if we are any closer to the environmental restoration which it asserts is the reason for asking for the initial funding? How do we evaluate the effectiveness of the funding we are providing? What clear and unambiguous performance standards are being adopted to determine if we are closed to success or have achieved success? Are we going to postpone any major program decision or alternative until we have the results of the early phases or are we going to agree on a basic blueprint and simply adjust it through adaptive management as we move along?

A related issue, the definition of our starting point. It's my understanding that the Early Restoration Program has not defined the baseline for determining the goals and targets for restoration activities. While there maybe a wide spectrum of views on how to create baselines, we nevertheless, must develop both an operating baseline as well as a financial baseline if we are ever to determine if we are making progress for the, literally, billions of dollars we are being asked to spend.

And four, are the affected parties of the public being given an ample opportunity to participate in the process? Have we institutionalized the process to assure that local landowners are fully appraised of potential program impacts? Have we institutionalized a process to assure that local landowners are protected from government manipulation of property values as part of a Habitat Rehabilitation Program.

I do not believe that these concerns that present insurmountable obstacles of the CALFED Program rather they represent reasonable attainable goals which should reflect the way government conducts its business. As mentioned last year, the Federal California Bay-Delta Environmental Enhancement Act coupled with California Proposition 204 advanced a partnership with potential funds of nearly \$1.5 billion. It has the potential to be used to expand the water quality, enhance water quality, and restore environmental resources in the Bay-Delta. Yet, how it is administered will be a test of government's stability to transition to a smarter, more efficient, less coercive mode of operation.

I understand that the Governor and the Secretary of the Interior met yesterday and released a statement and will extend a comment period for a month while emphasizing the importance of selecting a preferred alternative. I understand it will, actually, be only a draft preferred alternative which means that it will spillover into next year, into the lapse of the new State administration. And I presume that means that it will drag on for much, if not most, of next year.

I look forward to hearing from the witnesses and will recognize at this time the gentleman from California, Mr. Miller, for his statement.

STATEMENT OF HON. GEORGE MILLER, A REPRESENTATIVE IN CONGRESS FROM

THE STATE OF CALIFORNIA

Mr. MILLER. Thank you, Mr. Chairman, and thank you for convening this hearing. And I appreciate an opportunity to speak today and I welcome the witnesses and others involved in the CALFED process to the hearing. And certainly, in advance of their testimony and others who will not testify, I want to thank all of them for the monumental effort they have put into this effort.

Obviously, this is a critical issue for every Californian. The most important resource to the future of our State is water, and the recommendations, and policies enunciated by CALFED will likely frame how we think about and how we use water in California for a generation or more. For all too long, California and the west, in general, has asked only whether a water development project could be built. Little regard was given to the financing of the project which, generally, was paid through enormous public subsidies. Even less concern was paid to the environmental consequences of the water diversion, massive development, and widespread irrigation that flowed from the water-policy decisions.

Over the pass 15 years, Congress has enacted important reforms to water policy affecting California including the Reclamation Reform Act, the Coordinated Operating Agreements Act, and in 1992, the Central Valley Project Improvement Act. These laws directly address issues that are the official priorities of the CALFED process, environmental restoration, promoting voluntary transfers, reduction of subsidies and other incentives to an efficient use, and promoting the integration of project operations to serve mutual goals.

Implementation of many of these components of laws has been obstructed for years by those who oppose water management, contracting flexibility, and subsidy reduction. There is, however, a growing and justified concern in California that CALFED is perilously close to repeating many of the mistakes of the past. Particularly, the top-heavy reliance and costly and controversial water project construction. CALFED's common program elements do not receive adequate consideration in the EIS and her proposed alternatives to maximize the market-oriented approaches to promote the most efficient use of water. Transfer conservation, waste water reuse, progressive pricing and groundwater management must be more aggressively implemented. With CVPIA and other statutes, we have learned that the implementing reforms on a timely basis is far more complicated than pouring concrete.

CALFED must maximize water conservation, improve management, voluntary transfers to the maximum extent possible, and if costly new construction projects are necessary, then let us be assured that this time those who desire the projects are also the ones bearing the costs of paying for them. Let us remember that a good part of the goal of CALFED is to save the Bay-Delta Ecosystem which is in the state of collapse because of the decades of massive pumping and withdrawals by State and Federal projects.

A CALFED plan that is, primarily, designed to provide even greater withdrawals to fuel the tremendous population growth in other arid regions of the State strikes me, and I have no doubt, most residents of Northern California is simply being unacceptable. More of the responsibility for managing and conserving water and the naturally arid portions of the State will have to come from residents in those areas rather than making more and more costly demands on taxpayers and residents in the northern areas of Oregon, which in themselves are growing and in need of secure

water resources. The CALFED process is historic and all of California should be grateful to the extensive and difficult work already completed by the participants.

I am confident that public comments and the draft DEIS will help the CALFED participants to develop a new set of alternatives that address the full range of efficient water management resources. Let's make sure that before anyone obligates Californians to decade of debt, we have implemented, and not just promised, the operational managerial efficiencies that we know are possible with modern-water policy.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

The opening statements of other members will be included in the hearing record, without objection, and I do have, specifically, one from Mr. Herger, who is not a member of this Committee, but who has an opening statement, and that will be included in the record as well unless there be objection. Hearing none, that's so ordered.

[The prepared statement of Mr. Herger follows:]

STATEMENT OF HON. WALLY HERGER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to testify about CALFED and its impact on water within the state of California.

According to projections by the Department of Water Resources, California can expect a population increase by the year 2020 equal to the populations of Arizona, Nevada, Oregon, Idaho, Wyoming, Colorado and Utah. As a result, California could experience a water deficit of at least 1.6 million acre feet during average water years, with the water shortfall possibly mushrooming to 7 million acre feet during drought years. To put this in perspective, Shasta Lake, one of the biggest reservoirs in northern California, holds only 4.6 million acre feet.

The CALFED Bay-Delta Program was created to addresss conflicts over water useage in California's Bay-Delta region. There is no question that this goal is essential and necessary to the future of California. However, a CALFED spokesman recently stated that CALFED was, quote, "Tasked to fix the bottleneck in the Delta, not solve California's water deficit." end quote. While this may be technically true, such a narrow view is dangerously self-defeating. In reality, the problem is that the Delta does not have enough water. You cannot fix the Delta or preserve its unique environment without more water.

Currently, California is home to approximately 33 million people and sustains the world's richest and most diverse agricultural industry. The state is also home to diverse populations of wildlife and native plants. None of this would be possible, however, if it were not for our ability to store water for use in the arid summer months. Of the past twelve years, seven have been droughts and the state suffered serious water shortages.

California does not have unlimited options for producing new water resources. CALFED, however, focuses on proposals by extremists within the environmental community who suggest we take water away from existing uses through additional water conservation efforts. Again, water experts at the California Department of Water Resources have noted we are quickly reaching the

limits of water conservation strategies and that we will soon be hard pressed to satisfy the needs of the state's growing population. Another proposal to increase the water supply is to sink deep wells and increase the water drawn from the underground aquifer. As a third generation rancher who grew up in northern California, I can say this is one of the most extreme and impractical proposals I have ever heard. There was a time when we relied principally on groundwater to meet our water needs, but when the aquifer began to dry up and we sank our wells deeper and deeper, we were forced to install above-ground reservoirs to ensure we had enough water for summer use. We still rely on groundwater, but can only do so by supplementing with additional surface water. It would be fruital to return to past practices and further deplete our limited aquifer.

Clearly, the best solution for the Delta, and for California, is to place greater emphasis on upper watershed maintenance, and on off-stream water storage. In the past month CALFED has increased its commitment to improving the health of the upper watershed, and I commend CALFED for this action, however, none of the three potential alternatives included in CALFED's massive, 3,500 page draft environmental impact statement explicitly plans more water storage. Water storage is talked about in general terms, but you will look in vain for a map that points out where new dams and reservoirs will be built. What you will find, however, is a map that shows a peripheral canal. Not a structure to hold more water for usage, but an isolated channel designed to move northern California water south. Something is terribly wrong with this picture. This situation must be corrected and water storage, not the peripheral canal, should take precedence as the key element to fixing the Bay Delta.

In closing Mr. Chairman, until CALFED gives increased water supply the serious attention it deserves, I fear that any of the three current alternatives is destined to fail.

[The prepared statement of Mr. Radanovich follows:]
STATEMENT OF HON. GEORGE P. RADANOVICH, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF CALIFORNIA

Thank you, Mr. Chairman, for the opportunity to convey my comments on CALFED today. The CALFED agreement, which comprises a unique multi-agency partnership that addresses ecological and water supply problems simultaneously, is of significant value to the state of California.

I, along with many members of the California congressional delegation, have worked diligently to secure Federal funding for this project. Bay-Delta was funded at \$85 million in fiscal year 1998, and I fully support the fiscal year 1999 budget request of \$143 million.

As a farmer in the Central Valley, and a representative of the two largest agricultural producing counties in the nation, I am extremely concerned with any action that CALFED takes with respect to the agriculture community. It is essential for our state to implement a CALFED package that includes a balanced approach, which meets water supply needs, water quality objectives, and ecosystem restoration in the Delta. As it has always been intended, CALFED must address the importance of a reliable water supply to sustain the agricultural economy in our region. Water-use efficiencies must be applied to all stockholders—agricultural, environmental and urban. Additional conveyance and storage facilities are key elements to the program and must be included in any final package.

As alternatives are discussed, the protection of private property is also a high priority of mine. Private property rights must be secured throughout the process. Furthermore, CALFED

representatives or other Federal and state bureaucrats must obtain written permission from landowners when conducting surveys or other biological work on private property. Any actions that violate landowners' rights are unacceptable.

Consideration of the socioeconomic impacts of each of the alternatives is also necessary during this process. Taking agricultural land out of production will not solve California's water problems. Agriculture is a nearly \$25 billion industry in California. The livelihoods of farmers and others in local communities who are dependent upon the production of farmland would be devastated in exchange for the minimal gains in environmental protection that this unwise course of action would accomplish.

While I am still evaluating my position on the various alternatives presented in the CALFED Bay-Delta Programmatic EIS/EIR, any final solution that is adopted must be equipped to handle the necessary improvements in the operation of the CVP and the State Water Project for the long-term environmental, water quality, water-use efficiency and flood protection needs for the future of the State of California.

Furthermore any final solution should include the utilization of an open-channel isolated facility. Such a facility would provide the greatest flexibility in terms of future Delta operations, without abandoning the "common pool" concept of providing benefits to municipal and industrial and agricultural users alike.

Also, CALFED decisions must be implemented in a timely manner. Certainly, concerns must be addressed, however, this is not an excuse for delays. I urge all stakeholders and government officials involved to forge ahead this year to accomplish the essential tasks necessary to complete the CALFED process.

California's water needs are best met by maximizing an "adaptive management" strategy for ecosystem restoration and water quality and efficiency improvements. Adaptive management means having the ability to quickly and easily take water to and from different places in the Delta, at different times, using various amounts. The final solution must allow for this type of "need based" management of the resource, improve conveyance capabilities, and provide for the most effective water storage opportunities.

In summary, the solution to California's water needs must include providing a reliable water supply and a healthy environment at the same time. Some in the environmental community think that CALFED is only about improving the environmental condition of the Delta and not addressing the issue of supply. That is simply not true. One cannot—and must not—be achieved without the other.

I appreciate your time Mr. Chairman, and I look forward to continuing the work of providing long-term solutions to California's water needs, through the CALFED process.

Mr. DOOLITTLE. Today's hearing has a different format, somewhat, from the other hearings that we've conducted. We did this trying to look for, perhaps, a more useful format and one that would lend itself, particularly, to the nature of this hearing. The hearing today is organized into four panels with each panel addressing one program component of CALFED. Each panelist prior to the hearing was asked to address a specific question regarding CALFED, and we will ask the entire panel to give their statements, as we normally do, and then members will alternate questioning these witnesses. I'd like to ask the first panel of witnesses, if you'd pleased come forward and remain

standing. Take the oath, and then we'll begin.

Mr. Berlin, you are just going to remain where you are, but——[Witnesses sworn.]

Mr. DOOLITTLE. Thank you. Let the record reflect each answered in the affirmative. We are very happy to have you hear today.

The first panel will address the following question: how are we going to use the CALFED process to meet the future California urban, rural, agriculture, and environmental water needs, and has the CALFED process prejudged or eliminated some water planning options, such as on-stream storage, water reuse, water transfers, et cetera?

I think you're all familiar with those three lights there, but, basically, we urge you to try and keep within the 5 minutes. At the beginning of the fifth minute, the yellow light will go on, and you don't have to stop in mid-sentence, but it's a guide when the red light comes.

Our first witness today will be Mr. Tom Berliner from the City's Attorney's Office, city of San Francisco. Mr. Berliner you are recognized for your testimony.

STATEMENT OF TOM BERLINER, CITY ATTORNEY OFFICE, SAN FRANCISCO, CALIFORNIA

Mr. BERLINER. Good afternoon, Mr. Chairman and members of the Subcommittee. My name is Thomas M. Berliner. I'm general counsel for the San Francisco Public Utilities Commission. Thank you for providing me with the opportunity to appear before you to submit this statement concerning the water supplies benefits which are expected from the CALFED Bay-Delta Program.

The San Francisco Public Utilities Commission is a retail and wholesale water supplier. We provide water to approximately 2.4 million residents of the Bay Area in a service area which extends from San Francisco through the South Bay and Silicon Valley and up the eastern side of San Francisco Bay to the city of Hayward. Service areas which abut ours include the East Bay Municipal Utility District and the Santa Clara Valley Water District, with whom we share various customers in the Silicon Valley.

I'm here today representing the Bay-Delta Urban Coalition, which is an unincorporated association of major urban California water agencies. The Coalition has been extremely active in the CALFED process, and San Francisco has been an active member of that effort as well.

The Urban Coalition has put a great deal into the success of the CALFED process. Individually and collectively, we have been working for many years to achieve a long-term solution to the Bay-Delta problems. In our view, CALFED provides the best opportunity we have seen to achieve this long sought after success. Furthermore, the failure of CALFED leads us to an unacceptable return to the insecurity of years past.

I would now like to respond to the questions you posed to this panel. As to how we are going to use the CALFED process to meet the future water needs of urban, rural, agricultural, and environmental California, four basic elements drive the CALFED process: water supply, water quality, ecosystem restoration; and system integrity. The latter focused mainly on levee stability.

From the Urban Coalition's perspective, improved reliability of water supply is essential to the maintenance of our economy. This reliability will be achieved by improving water quality and

quantity, as well as restoring the ecosystem so as to reduce the conflicts between supply and environmental needs. As to water supply, CALFED will provide us with the greatest assistance in terms of improving water quality.

Urban water purveyors have made a strong commitment toward meeting their demands through a variety of sources. We are in the era of integrated resource planning efforts. Every major urban water supplier has invested substantial resources in these integrated resources plans. Components of this plan include improvements to water quality, conservation, reclamation, better use of local storage, including conjunctive use, and water transfers. Improved water quality is necessary if we are to achieve the potential of increased use of reclaimed water. Further, better quality water from the Delta will better enable water supply agencies to fully utilize lower quality water from the Colorado River or local sources.

Finally, improvement of the water transfer market is a major component of the CALFED Program. By improving Delta water quality, and access to transfers, urban supplies can be made substantially more reliable.

As to coordination with other California water planning activities, the urban water suppliers have been planning for their future for several years. As I stated previously, through integrated resource plans, urban agencies are seeking to balance their sources of supply. CALFED provides us with, yet, another opportunity to further augment these supplies. In addition to improving supply by virtue of improved water quality and increased yield, CALFED will also promote improved water management for the environment. For example, we are actively engaged in the effort to develop a sound Ecosystem Restoration Program Plan. An important component of the ERPP is adaptive management of fishery requirements. By improving the efficiency of water management for the environment, it will, hopefully, be less necessary to use water that otherwise could be used to meet consumptive needs.

Water agencies will continue with their own local planning efforts, and not rely exclusively on the CALFED process to meet their long-term needs. CALFED was not designed to meet everybody's needs, and it should not be regarded as the answer to all water-supply problems.

By coordinating local water supply efforts with the improvements expected to result from the CALFED process, we can decrease the tension between consumptive and in-stream storage uses of water. By reducing this tension, each sector will be freer to pursue those activities which are essential to its long-term security. The Urban Coalition is firmly committed to working with all interests to insure long-term supply reliability.

As to whether CALFED has prejudged or eliminated some water planning options, in our view, the CALFED process has been a remarkably inclusive. CALFED has been open to suggestions of alternatives for meeting water supply, environmental and infrastructure needs. CALFED has reviewed over 100 options and narrowed them down to the most preferred elements. It is considered the role of the water conservation, water transfers, reclamation, and potential infrastructure changes including over 40 reservoirs sites and twelve ways to move water around the State. Each idea has received a fair share of comment and scrutiny. In the end, many ideas had to be eliminated and of the three alternatives which remained, ultimately, only one will survive. It may be that the one alternative chosen will comprise a combination of the others, but in the end, we can have

only a single vision for the long-term solution to the Bay-Delta.

I conclude my remarks here. Thank you.

[The prepared statement of Tom Berliner may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our next witness will be Mr. Bill Pauli, president of the California Farm Bureau Federation. Welcome, Mr. Pauli.

STATEMENT OF BILL PAULI, CALIFORNIA FARM BUREAU FEDERATION, SACRAMENTO, CALIFORNIA

Mr. PAULI. Thank you, Mr. Chairman, and Members of the Committee.

On behalf of the California Farm Bureau and our 75,000 members, I'm pleased to have the opportunity to appear before you. I'm a farmer over in Mendocino County and grow wine grapes and Bartlett pears.

We are committed to seeking solutions which will insure a reliable, affordable water supply for all of California. California population is projected to grow by 17 million people by the year 2020, and without prudent planning, our current water deficiencies will surely grow.

California farms provide key supplies of food and fiber, \$25 billion in revenue, \$12 billion in exports, and important jobs, and coveted, open space throughout our great State. The CALFED process provides an unprecedented opportunity to craft a plan to meet our State's water needs for the next 30 years. I can't stress that enough. It's to look ahead for the future and the future growth of our State, and to plan for that. Unfortunately, the CALFED plan to date falls short of this goal. Current CALFED effort is based on redirecting agriculture's two most vital resources, land and water, to satisfy other uses rather than developing reliable, and affordable water supply.

Nonetheless, we are optimistic the CALFED process can succeed. There's three critical issues for agriculture: increasing water storage; minimizing fallowing; and strengthening our water rights.

Current total use of water in California is broken down into about 46 percent for the environment, 42 percent for agriculture, and 11 percent for urban usage. And additionally, millions of acre feet of water flows out to the ocean which is available for good uses year in and year out. Instead of redirecting water from productive agricultural and urban uses, we should concentrate on fully utilizing the water that now flows to the ocean. By conserving overflows, we can increase flood protection while saving water for dry years. We need to increase the capacity of existing reservoirs, such as Lake Shasta, Millerton, Los Vaqueros and, potentially, others as well so that that water can be used for agriculture, for urbanites, for our cities, and yes, for the ecosystem.

CALFED proposes to fallow 250,000 acres of prime agricultural land which holds senior water rights. Overall, fallowing could approach 1 million acres. California agricultural land has significant, global impact. As a matter of good public and social policy, this land should not be converted and we strongly oppose such efforts. We recognize new conveyance system or reservoirs will require the retirement of some acreage, and in those cases the landowners should be compensated. And we clearly recognize the same land will be removed, but the fallowing of agricultural lands for levee setbacks, shallow water habitats and other environmental purposes should not be part of the

CALFED process. The combined total, according to the EIR/EIS, could range from 396,000 acres and 914,000 acres removed. Protection of agriculture water rights is a key to the ultimate success of CALFED.

Farmers and ranchers depend on established water rights to maintain their livelihood. CALFED must assure surface and groundwater rights. Areas of origin must be protected and strengthened. Impact in those areas could be monumental. CALFED should abandon the notion that groundwater can be used in areas feeding the Delta as a future source of water for urban and environmental uses under the guise of conjunctive use.

We cannot support the continued investment of public money as long as farmers bear a disproportionate share of the burden in reaching the Delta solution. Farm Bureau supported Proposition 204 and previous Federal appropriations as a down payment to secure major improvements in the Delta water management. Unfortunately, both have been used to fallow agricultural land and set the stage to redirect agricultural water.

. We continue to support the need for a long-term Delta plan, but we are losing confidence that the solution will contain meaningful steps, primarily, water storage. Fallowing will seriously hurt California agriculture and the surrounding communities. I cannot stress the amount of impact that it will have in those local communities if that land is fallowed. We tend to forget about the people in the tire shops, the cafes, the newsstands, newspapers. We cannot underestimate the impact on those people. Therefore, it is impossible for us to support continued Federal funding until we see marked improvement in the proposal.

We are discouraged, but we want to remain optimistic that CALFED will turn the corner and work toward meeting the State's long-term needs for the next 30 years, and we are confident that that can occur. The main concern for us at this point is the devil in the details which we do not understand and have not been able to get clear through.

Thank you, Mr. Chairman, and members of the Committee.

[The prepared statement of Mr. Pauli may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

The next witness will be Ms. Martha Davis, Board Member of the Mono Lake Committee Sierra Nevada Alliance. Ms. Davis, you're recognized.

STATEMENT OF MARTHA DAVIS, BOARD MEMBER, MONO LAKE COMMITTEE SIERRA NEVADA ALLIANCE

Ms. DAVIS. Thank you very much. Good afternoon Chairman Doolittle, and Members of the Subcommittee. Thank you for the invitation to speak before you today.

My name is Martha Davis. I am speaking today on behalf of the Sierra Nevada Alliance and the Mono Lake Committee. Both of these citizen's groups work on water-policy issues in California. The primary focus of the Sierra Nevada Alliance in on watershed restoration in mountain counties. While the Mono Lake Committee works to promote conservation, recycling, and why-is-water-use programs in Southern California, I also serve as a member of the CALFED Bay-Delta Advisory Council, and on the CALFED Ecosystem Restoration Roundtable.

In summarizing my testimony this afternoon, I want to make sure that I address the two questions posed by the Subcommittee. The first question is how are going to use the CALFED process to meet future-California urban, rural, agricultural, and environmental water needs?

CALFED is addressing the State's future water needs in the context of fixing the San Francisco Bay-Delta. While it's not CALFED's goal to resolve all water issues in California, the water-use policy CALFED, ultimately, proposes to include in the final preferred alternative, especially the programs for increased conservation and water-recycling, will have a profound impact on how much water is available in the future to share between urban, rural, agricultural, and environmental water needs.

The recent developments of conservation and water-recycling programs in Southern California has already made a tremendous contribution to meeting the State's current environmental, rural, and agricultural water needs. Let me give you two examples, the city of Los Angeles. As a primary result of conservation programs implemented since 1990 in Los Angeles, the city is currently using the same amount of water as it did in the mid-1970's only now we are serving almost 1 million more people. The success of these programs have made it possible for the city of Los Angeles to protect Mono Lake, a vital resource to the rural community of Mono County, without taking water away from Northern California or the Colorado River. And that is a clear benefit to the rest of the State. Further, the city of Los Angeles believes that it can meet all of its future water needs even with all the growth projected for the region through additional conservation and recycling projects.

Second success story, the Metropolitan Water District of Southern California. At the peak of the drought of the calendar year 1990, MWD sold 2.6 million acre feet in imported water supplies. Since then, Metropolitan Water District has developed its Integrated Resources Plan, refocused its efforts on developing a more balanced mixture of local and imported water supplies, and helped the region to start to aggressively implement conservation, recycling, and groundwater management projects. The result, MWD has reduced its imported water sales down to about 1.8 million acre feet. Although this year has been wet, and I think they may go lower. Possibly as low as 1.6 million acre feet. This dramatic reduction in MWD imported water needs means there's more water available to meet the State's other environmental, urban, rural, and agricultural needs.

How much of a difference can future water-conservation and recycling make to meeting the State's needs? Let me answer with a question. How many in people in 1990 would have predicted the overwhelming success of conservation programs in Southern California. These programs have fundamentally reshaped our water demand, and there is still much more that we can, and should, be doing in Southern California. And what's been done in Southern California can be done elsewhere.

The second question posed by the Subcommittee is whether the CALFED process has prejudged or eliminated some water-planning options from the discussion? The answer is no. I don't think so. CALFED is not yet completed its planning process nor yet made a decision on the preferred alternative. Addressing the Bay-Delta problem is a huge, if not heroic, undertaking and the work of CALFED is far from finished. But I do, briefly, want to raise concerns I have been hearing about some of the information CALFED is relying upon in its evaluation of the water-planning options. These are the assumptions used in the California Water Plan, known as Bulletin 160. Bluntly, the concern is that this document has greatly overstated the future urban-demand projections and,

substantially, understated the potential for conservation and opportunities to recycle water. In other words, it's been making the problem with meeting the State's future needs a bigger problem than, perhaps, it needs to be.

I reviewed Bulletin 160 with an eye toward Southern California, and I agree that the document raises some troubling issues. For example, why does Bulletin 160 assert that water demand in 1995 for the South Coast Region was in the vicinity of 4.3 million acre feet when the actual demand was in the vicinity of 3.5 million acre feet? The 800,000 acre-foot difference is more than the entire water needs of city of Los Angeles.

Why does Bulletin 160 identify over 1 million acre feet and potential conservation and water recycling projects for the South Coast Region for 2020 that only count approximately 300,000 acre feet of this water in the final water projection? And how is this information incorporated into the CALFED environmental analysis? I mean, perfectly honest, I find it troubling when I see charts that show a potential shortage of 6 million acre feet for the year 1995, which was a year that we had ample water supplies. And I understand the need to normalize the data, but my question is what is the data that those projections have been based upon.

I don't yet have the answers, but I am confident that we will find them in the context of the CALFED process.

I'll end my testimony there. Thank you.

[The prepared statement of Martha Davis may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our next witness is Mr. Stephen Hall with the Association of California Water Agencies. Mr. Hall.

STATEMENT OF STEPHEN HALL, ASSOCIATION OF CALIFORNIA WATER AGENCIES, SACRAMENTO, CALIFORNIA

Mr. HALL. Thank you, Mr. Chairman, and members. It's a pleasure to be here. Thanks for inviting us.

The Association represents agricultural and urban water agencies around this State that collectively deliver somewhere between 90 percent and 95 percent of the delivered water in this State. We're the folks who, actually, deliver it to the users, the homes, farms, and businesses. As you said in your opening statement, Mr. Chairman, we're here to discuss the State's water needs and what role CALFED will, and should, play in meeting those needs, and in our minds, the two are inextricably linked.

We need additional water in a growing State. A State that's going to continue to grow by all projections. And CALFED, in our view, is the best way to provide for the water for that growing State.

There's a fair amount of debate still going on. You heard Martha Davis' testimony just now. There was perspective that says the water demands are overstated and the opportunities for the so-called "soft-path methods" are understated. I think that debate will continue, but one thing is clear and that is that no single option is going to get us where we need to go with respect to water supply for the

State. We're not going to get it by simply building additional reservoirs, but we're also not going to get it through more conservation. I think it's going to take a mix, and that's why we're supporting CALFED because CALFED provides the sort of mix that we think we're going to need.

At our present rate of growth, the most recent estimate are we're going to be somewhere 3 million and 7 million acre-feet short in the year 2020. Sounds a long way off. It's the planning horizon. By the time you plan it and build it, whatever it is, whether it's a new reclamation plant or new reservoir, you are going to need the water that you started planning now.

There is some question about the estimates that are being proposed by Department of Water Resources Bulletin 160, but frankly, there's no more credible study available. And although there remains debate about how much can be developed through conservation versus additional development, those are all within a reasonable range and if you look at any of them, it clearly shows that no matter whether you take the low end or the high end of the range of estimates, you're still going to need that mix.

Everybody understands in California who studied water that in decades past we met our needs through building additional reservoirs. In the last three decades, the 1970's, 1980's, and 1990's we've met our needs through, what the environmental community calls, the "soft path," conservation, reclamation, land conversion. We've got a remarkable record in that. In the urban setting in Southern California alone they've spent over \$160 million, conserved nearly a million acre feet of water, enough to meet the needs of the city of Los Angeles, as Martha pointed out. In fact, I was glad she made my point for me. We've done quite a bit in the urban setting.

In the agricultural setting, the record in some ways is even more impressive. Water use in the agricultural setting through land conversion and conservation has been reduced by 4 million acre feet since 1980. Production in the meantime is increased by 50 percent. Projections are that agricultural-use will go down another 2 million acre feet over the next twenty, twenty-five years. And agricultural has invested over \$2 billion—\$2 billion with a b, in drip systems alone.

Urban and agricultural-water users have gone a long way in conserving. It's something we should have done and we're glad we did, but clearly, conservation alone is not the answer. It won't fix the system in the Delta which is badly broken. Today, we have conflicts between protecting fish and delivery water. It cannot be fixed with the existing system. We have drinking water quality problems that can't be fix with the existing system, and we're badly in need of additional flood control in this State. That's why we believe as a part of whatever develops, CALFED has to deliver more water for the State. We're glad that CALFED now has up to 6 million acre feet of additional storage in its plan, and we're going to stay engaged and supportive of CALFED and see that as a final plan it contains a significant amount of additional storage.

We will also, though, continue to support the so-called "soft-path methods." CALFED has as much as 4 acre feet of water through conservation for every 1 acre feet of additional yield in its projections. What that agricultural final mix looks like in terms of how much conservation and how much water supply is what CALFED will sort out over the next several months and, I think, everyone of the stakeholders here at this table, and in this room will stay engaged to try to help them get to that right mix. But the bottom line for all us—the thing that I think we all agree on though we disagree on some of the facts, is that CALFED is the best opportunity that we've had in a generation

to solve the problems, reduce the conflicts, and meet our present and future water needs in this State.

CALFED must succeed and the Water Community is committed to staying engaged to make sure that it does.

Thank you.

[The prepared statement of Mr. Hall may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

[Panel 1 questions and discussion follows]

For the benefit of the members, we'll probably will do a couple of rounds or so of questions here. Mr. Pauli, are your members of the Farm Bureau, actually, actively opposing the funding in this year for CALFED?

Mr. PAULI. No. Our concern is that if we don't make progress in terms of the issue related to fallowing and make or have assurances related to additional storage, that it simply does not make sense to continue to fund the process because the process needs to include those two to be viable, and that's what we're saying. Not to cut funding, but in order to continue funding, it needs to be a well-rounded and complete program or we would not favor continuing the funding this next year.

Mr. DOOLITTLE. Are you expecting some assurances to be given at some point before final action is taken this year or are you waiting to see what happens next year in order to make that conclusion?

Mr. PAULI. Well, hopefully, as we go forward with the discussions during the summer and fall we'll receive some adequate assurance and, there again, that part is quantified, but adequate assurances that those two issues will be addressed in a way in which we can continue to proceed with the process because we all recognize how important the overall outcome of the process is.

Mr. DOOLITTLE. It's my understanding we presently have, not in this year, but on the average we presently have in an average water year a water shortage right now. Is that—anybody disagree with that?

Ms. DAVIS. I'm sorry. Do we have a shortage this year?

Mr. DOOLITTLE. Not this year, but that in an average year, we have a deficit already at least as I understand the California Department of Water Resources analysis of this. Apparently, they estimate that there's about a 1.6 million acre-foot shortage for an average water year.

Mr. HALL. I will say that we cannot reliably meet the needs of all areas of this State in an average water year today, and that there is groundwater overdraft which is, in part, indicative of water shortages.

Mr. DOOLITTLE. OK. I think we're probably get to the quantification in one of the other panels, but—I mean, if no one—does anyone dispute the assertion that we are short on the average right now?

Ms. DAVIS. I don't know how to answer the question because when I read Bulletin 160 and I try to put all the pieces together and understand how they put together their numbers, I don't know they got to the outcome they got to. I think that part of the point of the testimony I wanted to make

today was the need for a good, quality answer to that question. What are the water needs of the State currently? How do we define for urban, for agriculture, for the environment the water needs so that we track through those numbers and then take a what the supplies look, and take a hard look at the match and whether there's a mismatch. I do believe there is a perception that there is a tremendous mismatch between supply and demand, but I don't think we've got the document that gives us the answer to the question.

Mr. DOOLITTLE. Well, we'll ask Mr. Potter when he comes on Panel Number 2.

Mr. HALL. Mr. Chairman, may I just make one additional comment on that.

Mr. DOOLITTLE, Yes.

Mr. HALL. Regardless of what any report says, when you have declining water tables and when you have water users who are chronically receiving 50, 60, 70 percent of what they've contracted for and are paying for, that to me strongly indicates the shortage. And that's in normal and above normal years.

Mr. DOOLITTLE. Well, that would, certainly, be an indicator of that to me as well, and I presume, CALFED believes there's a shortage or they wouldn't be proposing to fallow these hundreds of thousands of acres of prime agricultural land which, I think, is a real concern.

I am interested in seeing our water supplies increase, and Ms. Davis testified she didn't think any of the options had been foreclosed which I guess means that even on-stream storage isn't foreclosed under CALFED. Is that—anybody here disagree? Do you believe it has been foreclosed by CALFED?

OK. No disagreements so far. You all, or some of you alluded to it, but I wonder the discussion of the soft-path land is to increase conservation, and the conservation of the city of L.A. is remarkable. I think it shows what we can do with improving technology and understanding of our water systems.

But it seems to me that it might be dangerous to rely upon conservation as the main solution to our water problems because I look upon that as kind of being the emergency solution, when we run out of water or have a crisis facing us. It seems like we're giving up our response capacity if we use conservation to be the main source for additional water development. I mean, obviously, where we can conserve without impacting significantly our lifestyles, that's one thing, and that apparently has gone on in the city of Los Angeles, and in other areas, and that's very encouraging.

But there's always the option to impact our lifestyles, when necessary, in the event of a major drought or something. I would like to see our policy increase the amount of water available so that we don't have to—so that we no longer have the ability to respond in an emergency without experiencing grave, negative consequences.

Did anybody want to comment on that?

Mr. PAULI. Mr. Chairman, I think we need to focus to the future. You know, we've made tremendous strides in agriculture, tremendous strides in urban use, in terms of conservation, and being much more efficient with the water we have available. And yet, as we look forward over the next 20 to 30 years, I think Mr. Hall said, as you look forward, what are we going to do with the growth with the next 15 or 20 million people?

We agree already that there is a shortage, the magnitude of which maybe we can't quantify, but

clearly, a shortage. What are we going to do for the next 15, or 20, or 30 million people who come to our State? Can we provide water for all of their needs, including recreational environmental without additional surplus or additional supplies and storage? Can we continue to take all of the water that they're going to need from conservation? At some point, I think we can only conserve so much.

Mr. DOOLITTLE. Thank you. Mr. Miller is recognized for his questions.

Mr. MILLER. Thank you, Mr. Chairman, and thank you to all of you for your testimony. This panel alone probably has given us a week's worth of questions, but we'll see if we can get it done this afternoon.

Well, let me just go to the point that's been raised here. Ms. Davis, in your testimony what you describe as discrepancies, or questions raised, I guess would be better, we don't know if they're discrepancies or not, but questions raised by Bulletin 160 of State Department Water Resources, I don't know how exhaustive your list is, at one point, the South Coast you refer to a number of times, but they're fairly substantial numbers. It looks to me like somewhere between conservation and overstatement of use. You're very close to 2 million-acre feed of water. Is that correct?

Ms. DAVIS. The first number that I refer to is for 1995, and the second was for the year 2020. So I was trying to cover both current and the future situation——

Mr. MILLER. OK, I see. I see.

Ms. DAVIS. But, when you start, there are a very large number of comments that have been submitted to the State Department of Water Resources that raise similar questions, and a substantial amount water, both looking at 1995 and 2020.

Mr. MILLER. Well, my concern would be that if the fall to 160 is as deeply integrated into the CALFED—others can respond to this later—as you suggest it is, if there are flaws there with respect to assumptions made about usage or about conservation or the future of usage and/or conservation, as you carry those into the CALFED process, it seems to me, we start a multiplier effect here, as we start extrapolating these things out to 2020, we hope that CALFED carries us more than a few years down the road.

The impact on water decisions, the impact on taxpayers can be fairly dramatic. You can take a small area here and it can be rather large out there in the future.

Ms. DAVIS. I agree. I think that everything that CALFED stands for is trying to get the best quality information pulled together so that we can make good decisions about California's water future. These questions need to be answered.

Mr. MILLER. You know, my concern is a couple of things. A little bit of this is déjà vu. I sat in this hearing room for 25 years, and I probably spent the first ten with people sitting at that table telling me that if we didn't build a thousand nuclear power plants, if we didn't bring on line X number of generations, year-after-year-after-year, this economy and this country wouldn't go. Later, we find out, that we should be growing economy and decrease your power consumption rather dramatically in this country, actually.

And now, California taxpayers are looking at \$28 billion in stranded costs, because a lot of decisions were made on bad underlying assumptions. It turned out just not to be the case. And here, we're looking at whether you generate a million-acre feet of water in conservation, non-structural

ways are two million-acre feet, or whether you generate it behind a large structure is a big difference to the taxpayer—very substantial difference if you're going to ask for general obligation bonds.

So, I don't know if you or Mr. Hall is quite correct here, about how you attribute this, but it seems to me that the test would be if this was the plan to build a motel, and you say, I believe my occupancy rate is 90 percent, loan me the money, but if the figures show that it's really 30 percent, you made a drastic mistake. And so the question is here, if we're going to go to the taxpayer at some point, because I think we're in agreement with what Mr. Doolittle said, that none of these options are off the table, and nobody believes they should be taken off at this point.

But we've got to start in this common-period, and I guess in the next common-period that the Governor and the Secretary have agree to, we've got to harden this information. Because at some point, we're going to go to the market, or we're going to go to the taxpayers, at minimum, if we won't go to the market. It may not fly in the market, but with unfortunately, the taxpayers, it might.

It's analogous to what goes on around here. We're arguing now over cuts, and spending, and tax-cuts. And what they're saying is they want to know you've made every effort to cut the spending, so they know what they have for tax-cuts, or before you raise taxes, you want to know that you've made every effort here.

And so, a good chunk of the questions that the chairman's asked you and other panels to respond to, this discrepancy is absolutely vital. And we're going to go to the people for a big flood control bond. They're either going to double-back on water—they ought to know that we've rung every drop of water out of this system that we can at the lower cost if that's available. Otherwise, we're going to look like the utility industry. Well, we are the utility industry. We just haven't had our turn in the de-regulated atmosphere. But, we shouldn't repeat that history, or be within coming along and asking people in 2020 to keep coughing-up money for a bond issue, and the benefits have disappeared.

That's my opening statement, Mr. Chairman.

[Laughter.]

Let me just say that I think this is absolutely fundamental. No matter how you think the end of this process comes out, if we cannot go to the public with hard figures, I think we're doing a real disservice to ourselves, in the interest of putting some stability into California's water system. But we're going to be doing a real disservice to the taxpayers who were going to be asked, apparently, under a couple of scenarios to foot most of the bill.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you. Mr. Pombo is recognized.

Mr. POMBO. Thank you, Mr. Chairman.

Ms. Davis, do you believe that water needs for the future of California can be met through conservation?

Ms. DAVIS. I think the experience from Los Angeles is instructive. In 1990, when we were in the midst of litigation with the city over the protection of Mono Lake, the city insisted that it could not afford to share a single drop of water with Mono Lake. That the city's growth, water needs, and concerns about the growth of those water needs were so large, so monumental that it was not possible——

Mr. POMBO. And we—they adopted low-flow toilets, shower heads, I mean, they did it—we did it throughout all of California. We did water rationing during the drought. We did a lot of different things. But the reality is they've done all of these things to this point. They've gone after the easy conservation, and I think that, that's true with all of California; it's true with agriculture. They've done everything they could, in terms of what they could realistically do at an economically viable place.

Now, we're talking about adding 17 million—the projection—17 million people, additional land, it is going to be irrigated, all of these different factors; will conservation alone do that?

Ms. DAVIS. Well again, going back to the Mono Lake example, as a result of the conservation that has been done to-date, the city has saved more water than the entire amount of water that they divert from the Mono Lake ecosystem. And the way this city has been looking at conservation, they've linked it with solving every problem that the city is facing.

We have had problems with sewage. We have had problems with antiquated infrastructure in Watts area, South Central Los Angeles, and by investing in conservation, we're investing in our community. It's a combination of solving problems and drought-proofing our economy. So what's happened is, we've learned that conservation is not just a short-term emergency response to a drought, although there's that component of conservation, what we've learned is that if we don't conserve, if we're not building in water recycling projects, we're making ourselves economically vulnerable during droughts.

And so, what the city-council has said, their plan is to meet future growth through conservation water recycling projects.

Mr. POMBO. So their forays up into the valley to buy farmland, and transfer the water from the farmland in the valley into southern California is not real? They're not really doing that?

Ms. DAVIS. I'm not aware of LADWP with proposals to transfer water from the Central Valley. Mr. POMBO. Well, we'll go on.

Mr. Hall, do you believe that conservation of our water in California will meet the future needs of California over the next 20 or 30 years?

Mr. HALL. No, I don't. As I said in my statement, I think conservation of water, and frankly, of other precious resources is a strongly indebted ethic in California, and that's a good thing, and that we can make additional progress. But, as I said in my statement, we have made remarkable progress in the area of conservation, and the downside to that is, that it does harden demand. The demand that remains is less flexible. And when—because it's not if, it's when—we have our next drought we will have less capacity to conserve. I think that's a risk worth running, but only if we also put together a mix of additional water supply options.

I think, we're at a point in California water, where the cost of water, both in dollars, and politically, is such that you cannot develop additional supplies, unless they make a lot of sense. I think we're at the point now, where we can go forward with a mix of additional conservation-reclamation if we include additional water supplies, and we can make it work now, and in the year 2020.

Mr. POMBO. Do you believe that any water plan for the future of California that does not realistically look at the development of new surface water resources is being realistic?

Mr. HALL. I frankly don't. I think there are other options that are easier to do, and perhaps,

more affordable, conjunctive-ousting—my favorite example. But there are some things conjunctive-use can't do; flood control is one of them. You don't get much flood control benefit out of conjunctive-use as you do out of surface storage, whether it's on-stream or off.

Mr. POMBO. Mr. Pauli, agriculture has done a lot in terms of conservation over the past several years. Do you believe that there is a huge amount that they could do in the future to save water?

Mr. PAULI. Well, we'll currently continue to try to conserve water, and I think we can continue to make progress in a number of areas. But, we will reach a point at which we can no longer conserve additional water. Where that is, I'm not sure because we continue to have technology that does allow us to conserve water, but there will be a limit.

The other thing that's clearly occurring as part of the conservation effort, we're converting from one type of cropland to another type of cropland as though we've gotten some benefits there. But where the limit is, I'm not sure.

Mr. POMBO. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you. Mr. Dooley, you're recognized.

Mr. DOOLEY. Thank you, Mr. Chairman, and I guess first-off, I'd like to express just a little bit of frustration because some of the opening statements, and including that of Mr. Miller in that, we appear to be finding ourselves lapsing into some of the old rhetoric, and some of the old battles that got us into a position where we weren't able to find solutions. I think I, myself, was looking at this cow-fed-process as a best opportunity for us to move forward in a collaborative fashion with all the stakeholders at the table, in order to try to find some solutions.

And while I had took some exceptions to Mr. Miller's remarks, Mr. Pauli, I would say, as a farm bureau member, I also take some exception to the California Farm Bureau basically coming out, and saying that they're not going to support public funding if these two conditions aren't met. Because I think that disrupts the opportunity, or impedes the opportunity, I guess it is, for us really to try to move forward.

We're not all going to get everything we want; it's clear. And, I hope that there will be a little bit of softening of some of the rhetoric here as we move forward. Because I think, in some of the testimony, where Mr. Doolittle asked all of you to testify on whether or not the CALFED-process was prejudging. I mean, we heard in so many opening statements that it appeared that we were already making statements, in terms of prejudging, in terms, that we are looking at favoring concrete solutions over recycling and others, where we are looking over taking greater withdrawals out of the Delta over the others, and I guess, when I look at the various alternatives that you have been offering, that we're still in a process, I have trouble seeing how any of us can say that we are now at the point where we're prejudging anything, because we haven't determined what the drought process is.

I also express a little frustration over this Bulletin–160. I think it's appropriate for us to really ascertain the accuracy of this document. And, I think, that's a legitimate issue that I would hope that during the remainder, and the balance of the CALFED process, that we will continue to look at, and make our determinations of what the final draft proposals should be. But again, I think that we have to be careful that we are going to be trying to justify whatever our personal pre-judged position should be based on whether or not that is valid or not.

I guess one of the other issues that I was most concerned with, there was a statement made that there wasn't enough consideration given to market-oriented approaches, and in that reference, I think we were probably referring to transfers. I guess, Mr. Berliner, you made some reference to that. Has this issue from your perspective, been adequately addressed? Has it been taken off the table, or where are we at as we look at water transfers?

Mr. BERLINER. I don't think that water transfers have been taken off the table at all, in fact, quite the contrary. I think water transfers are one of the major issues in the CALFED process, and an area that the urban community is looking to, very favorably and quite strongly, as being available to meet some of our future needs. So, we intend to rely quite heavily on water transfers. I had ordered to move water in the areas that are water-short.

I might comment about an earlier conversation that had taken place regarding conservation. Certainly, urban areas are not going to be able to meet their future needs strictly from conservation. Water transfers and additional yield from the system are going to be essential.

We met last week with members of the business community. There was a letter signed by 28 chief executive officers, urging the President and Governor Wilson to proceed toward a preferred alternative by the end of this year, and in their view, water transfers was one of the key components of the CALFED program, and urged that review of water transfers continue. We support that. We believe that we do need to move toward preferred alternatives, and that water transfers are a very important component. We are glad that the business community is becoming engaged in this. After all, the California economy, the business community is what that's all about, and water is a key, in part, to the survival of our economy.

So, water transfers are hugely important, but I would add a caution which is, that water is essential. It is not equivalent to buying a car, a totally free market in water is not possible. You cannot simply move water toward money. Water has to stay, in communities words, essential. And we cannot see wholesale transfer water, simply based on money alone. So, an entirely free market in water is something we would not support.

Mr. DOOLEY. Ms. Davis, I understand you're a member of the Bedock process advisory group, would your statement in terms of questioning the need for water, a need for additional water developments—excuse me, and yield, I would point out, through means other than just conservation and soft-path approaches, then, do you object to, during the CALFED process, the consideration as I think, Mr. Berliner identified that they were looking at potential infrastructure changes, including over 40 reservoir sites, and 12 ways to move water around this State, do you think that it is inappropriate for that to be considered during the CALFED process?

Ms. DAVIS. No, I do not.

Mr. DOOLEY. So, then, when we're looking in terms of the potential way we can move the process forward, and you're certainly not saying that you're not open nor should we be open to looking for additional yield that might be actually new surface or whatever water infrastructure developments are in need to increase yield?

Ms. DAVIS. I think the CALFED process has to look at all the options.

Mr. DOOLEY. All right, thank you.

Mr. DOOLITTLE. I'm going to reserve my time for now, and recognize Mr. Miller for his

questions?

Mr. MILLER. Thank you, Mr. Chairman.

It would be a mistake if people suggested that these line of questioning is about whether or not an option will fill the needs of California. The whole CALFED process is to determine the range of options, and what mix of options make the most sense for the future of California. And that continues, I think, to be the mission.

The question we get to now ask, and what I characterize as a mid-term review here, and I'm not sure Lester would be happy with that because that sounds like he's going to be doing this the rest of his life. But, it's at the mid-term review, you've got to start asking and narrowing tougher and tougher questions. And, I think, some of the questions raised about the basis, that Ms. Davis had raised, about the basis for 160, and then the use of 160 in this process are very legitimate questions because they have huge ramifications for how you measure different alternatives, the cost, and the efficacy of those alternatives.

No one here is suggesting that all of our needs are going to be met with conservation. I guess maybe that could be a conclusion, but there's no evidence that that's the case so far. But, when you're picking choices you've got to start at some point, match them-up based upon the need. I have people in the financial community in the San Francisco Bay Area, from our leading banks that tell me if we had a free-market system, there would be a surplus of low-cost water available in our State; they just believe it. I've sat for hours, went through them—they were not exactly ideological travelers with me—and, when we got all done discussing this, and all the ramifications of the politics of water in California, they said, in a real-market system there would be a surplus of water available.

Now, you made a decision, Mr. Berliner, the people you represent, that we have other values in California whether it's supply for San Francisco or whether it's the future of agriculture, or what-have-you, but those decisions also come at a cost. Because if you said you're going to take agricultural water and throw it out on the free-market, it be a dramatic change in the make-up of our State. I don't know if it would be winners or losers. Because I don't know if just trading in a row-crop for a three-bedroom-two-bathroom home necessarily makes it a better State.

But, there are those who suggests, like natural gas, people like myself who fought those market forces all of those years, kept saying, just throw it out in the market, you'll have more natural gas than you know what to do with, and you'll have it at prices that people can afford. Well, for the last 10 or 12 years, they've been proven correct. I don't know if that will be proved in the long-run or not, but these questions must be asked. Because we are now getting into a different process.

We're getting into the process of selection. And so, whether or not there's a million-acre feed in conservation or two-million-acre feed, or the market can generate surpluses, or transfers can generate additional water, these are crucial questions at this stage. And, I just think that it's very important that they be asked.

Let me, on another point, Mr. Pauli, welcome and thank you for your testimony. But, let me ask you a question because—and I only ask this because I'm not clear of the accuracy of it. Somewhere in your statement, on page two, you said that your concern was about Proposition 204, and you say, "that Federal appropriations have been used in large part to follow agricultural land and set the stage to redirect agricultural water to other users." Is that accurate?

Mr. PAULI. Yes, sir, I believe so.

Mr. MILLER. I thought we were using a lot of this for some restoration projects, and a lot of fish screens so irrigation districts could continue to take water, and some other things.

Mr. PAULI. We're clearly using it for a wide range of products. I mean, there's not one simple answer to one thing that we're using it for. It's a wide range of things. Yes.

Mr. MILLER. OK, so, I guess, maybe Lester can clarify that or we can get that information for the Committee. The chairman's raise, and I think it's an important issue.

Let me just say, Mr. Dooley referred to breaking down the comedy here, the suggestion that somehow, 204 was the environmentalist money, and now somebody else is entitled to a pot of money to build structures, there's a lot of that environmental money that is there, and the reason we're here in the CALFED process is to avoid the crash of the system, so that people think that they can get, as Mr. Hall pointed out, additional yields out of this system if we shore-up the environmental structures. So, the benefits flow a number of different ways. Just as when people go to build these dams, they're going to want to tell us what great environmental structure they are, so they won't have to reimburse for the cost. These will become the biggest environmental projects in the western United States by that time.

So, I just want to make sure that we don't, "that was your money, now it's my turn." Because there's an awful lot of money there that is going to benefit a whole lot of different purposes. As I understand, some of these projects that are done in terms of watershed restoration, the fish screens, and others. I don't know that money has actually been spent to fallow land.

Mr. PAULI. Well, we clearly supported 204. Our primary concern is the fact that when you start talking about whether 600,000 or a million acres, we know there's a range there, and we don't know the exact number that's going to come out of production agriculture. We're concerned.

Mr. MILLER. Yes, but we haven't spent money. I guess what I'm trying to clarify, we haven't spent money, to date, to do that.

Mr. PAULI. No, but at some point, you'll get an opportunity to spend money for that. I mean, it says voluntary purchases or acquisitions, so you will get a chance if the program goes forward to spend that money. Somebody's going to have to pay for that land.

Mr. MILLER. All right. I'll live with that. Thank you.

Mr. DOOLITTLE. OK, Mr. Pombo.

Mr. POMBO. Thank you, Mr. Chairman.

Mr. Pauli, in terms of land that's going to be fallowed or retired from use, you stated that it would be somewhere between 400,000 and 900,000 maybe as much as one million acres of land that could possibly be retired under this plan. We know that there is a proposal here to take about 250,000 acres of land, and retire that, mostly in my district.

Just to put that in context. San Joaquin County has 467,000 acres of irrigated land. If this were to be put into place, the 250,000, about half of the irrigated land in San Joaquin County would be taken out of production. What impact would that have on the economy of San Joaquin County?

Mr. PAULI. It would clearly have a major impact, and not just in terms of the land that's removed per production, because clearly, those people in theory, are going to be compensated for the sale of their land to the restoration projects, but the people who are put out of a job, the taxes

that aren't paid to the school districts or the water districts for the other community services districts, the cannery and processing facilities are not going to receive that product.

Now, I don't know what the mix would be of that 250,000 acres, but probably, a quarter of it would be tomatoes. I mean, you're talking about an awful lot of tomatoes, and those are going to mean workers who aren't going to be working at those processing facilities. There are going to be banks that aren't going to be getting paid because of the mortgages on those processing facilities. The earthquake effect is going to be felt much broader than just those farmers who receive payments for their land. It's going to have a big impact on the communities across-the-board, in terms of things we haven't even contemplated yet.

Mr. POMBO. Mr. Hall, along the same lines in talking about the retirement of land. One of the things that they go by on this report, and you mentioned six million acre-feet of water in response to a question, one of the basis that this report is going off of, is that, by retiring that land that they're going to create new water. And that water is going to be transferred either to other contractors or to environmental uses. The people that I've talked to will argue that letting those islands flood, creating the wetlands out of it, is going to use as much if not more water than irrigating it. So where is the additional water going to come from?

Mr. HALL. I don't have a ready answer for the last part of your question, though it intuitively makes sense. That, if you keep the area flooded, and divert water to flood it, you're probably not going to save much, if any, water. I will say that my membership is not in support of retiring ag-land to reallocate the water.

It is true that if we were to build a system today, we would probably set back levies, we would develop more riparian habitat in order to protect the fish, that use that system just like we do. Because the fact is today there are fish numbers declining, and because of that, they're becoming endangered, they're listed as endangered, and that, in turn, impacts on every diverter and user out of that system. It does seem clear that we're going to have to develop additional habitat along the Delta corridor, and along the Sacramento/San Joaquin corridors. I don't think we need to retire the amount of land that you all have used in your estimates, and we would not support that.

Mr. POMBO. Unfortunately, it's not my estimate. I got it out of the CALFED. I mean, if it was my estimate it wouldn't be anywhere near that high.

Mr. HALL. I understand. But the numbers that you all have discussed today, which come out of CALFED, I'll let Lester now talk about that, but we are going to need some land to develop habitat, so that, the water supplies for folks in your district, and the folks who use the system up-and-down, and as exporters, can continue to rely on that supply. Obviously, we're not interested in retiring any more land than is absolutely necessary. And, we would not support anything other than a willing seller sort-of basis.

Mr. POMBO. But the land has to be identified.

Mr. HALL. It does have to be identified, and we would, as I said before, would like to see the amount of active agriculture land that's now in production, see the amount of that converted, kept at a minimum.

Mr. POMBO. Let me ask Mr. Pauli a followup question on that. Mr. Pauli, you're a farmer. If you were looking to expand your operation, and you looked at a ranch in San Joaquin County, and

it was slated for possible purchase by the State or Federal Government or by someone else to be turned into habitat, would that be a parcel that you would continue to look at or would you look elsewhere?

Mr. PAULI. No, I would not look. And the bigger problem would be is if you were interested in a piece of ground alongside of a farmer. He had two pieces. One, he said, I'm not going to commit to the program. I don't want to sell it. I want to see it stay in production agriculture. And I said, well, I'm interested in buying that. And the next day I learned that the 2,000-acre piece of ground alongside of it has a willing seller, and he's going to convert. I would not then be interested in the first piece of ground because of the impact that it's going to have on me to farm that piece of ground alongside of land that's owned by the state or the Federal Government, and the consequences of doing that.

So, we clearly do value the land, and my ability to sell it.

Mr. POMBO. So, the result would be, even though the Federal or State government has purchased the land, not bought an easement on it, they've not bought it fee-title, all they've done is put it on a map or put it in a book, like this, and said, that we want to buy that land. So the end-result is we have devalued the property.

Mr. PAULI. I believe so, yes.

Mr. POMBO. For agricultural purposes, it has less value today than it did before it was put on a map as being possible habitat for something.

Mr. PAULI. I believe it's already impacting land prices in that area, because everybody can see what's coming.

Mr. POMBO. Mr. Chairman, are we going to have the——

Mr. MILLER. I just answered your question. It's absolutely a point in for me. How would you go about this process. I mean, we know that there's going to be some riparian restoration, there's going to be some landowners that have already indicated some willingness in some of these areas. How do you go about that process? You've got to do some planning. You've got to identify it so that it passes must-do. This is an improvement.

Mr. POMBO. I've been arguing for the past couple years that they have to be very careful about the documents that they put together, because once you identify the lands that are suitable for purchase, you've impacted the value of those lands.

Mr. MILLER. Well, you know, we've had a hearing on that. I don't disagree with you that you don't be a landowner living under this kind of uncertainty. I just wonder, how do you then proceed?

Mr. POMBO. Well, with their proposal, even if you take the lower figure of 250,000-acres, I don't think there's anybody in this room who can honestly stand up and say that they're going to have enough money to buy 250,000-acres of land, and yet, they've clouded the title on that 250,000-acres of land just by saying that we are going to go out and purchase it. And there's nobody in here, George. And you know as well as I do, that they're ever going to have that money.

Mr. MILLER. But you've got to pass environmental must-do, you've got to pass a whole series of riff, they can't put in a blank. Well, you can't say, well we're going to have blank-acres of land. So, at some point, it's what any city or country goes through with zoning or whatever. You've got to say, look, this is open for consideration, and then the process refines it down or something. Maybe

it's in these processes that they decide that they should be talking about 100,000 or 200,000, whatever the figure is. But, I don't know what the option is for them. I appreciate your concern. I think it's real. I mean, in the real world, that's a problem, but I don't know what the better vehicle is.

Mr. POMBO. Mr. Chairman, are we going to have an opportunity to have another round of questions with this panel?

Mr. DOOLITTLE. Well, I would remind our members, there's three more excellent panels to go. I think we ought to try and wrap-up. Well, let's just hurry.

OK, Mr. Dooley. OK, Mr. Dooley is going to pass on his questions. I only have one or two myself. There's a lot we could talk about here, and I think that's obvious, from the way the hearing's been going on.

We have three other hearings, Mr. Pauli. There are conversions going on in agricultural land, but we're moving in some areas, more toward permanent crops, and away from the annual plantings, and it's been pointed out that in the case of going to the permanent crop, you then lose your flexibility. You absolutely have to have the water then. You don't have the option of not planting that year, or something like that. And, of course, the permanent crops use water all year long. Would you care to characterize whether this is a trend? Can we generalize, and indicate that this is going on pretty much throughout the Central Valley, or is it just in isolated areas?

Mr. PAULI. I think, I think, Mr. Chairman, there's a couple of points there. No. 1, generally, we are converting to the higher-value crops, permanent crops, and the trend there is because that's where there's still viable agriculture. It's where you can still make a profit, where some of the other crops, we haven't been able to. Certainly, that doesn't include some of the other major crops. We tended to move away from some of the livestock-type of operations, and more to the tree and vine crops. We haven't necessarily moved out of cotton or rice or some of those crops. So, we have moved to that.

No. 2: clearly, as we look ahead, you don't have the same flexibility. I mean, you can't shut those trees or vines off for a year or for 2 years during the drought. Whereas, if you were in some of the other crops, even tomatoes, as an example, and there wasn't the water available, and you didn't plant for that year, you wouldn't necessarily have the same kind of losses that you would in a permanent crop.

Mr. DOOLITTLE. It's very difficult for farmers to know what amount of water you will have, isn't it?

Mr. PAULI. Well, you know, that's why the question of assurances and reliability become so fundamental in this process. And, that's why we continue to stress that one of the things, I think for all water-users, whether you're an urban water district or whether you're a small, rural agricultural water district, assurances and reliability so that your customers, your members in making their commitments, whether it's to a sub-division in homes, or a school, or a hospital, or whether it's to a processing facility, or 100-acres of almonds, that you're going to have assurance and reliability of that water in order to make that investment. So assurance and reliability are absolutely fundamental in this whole process so that we know where we are, and what kind of commitments we'll have for water.

Mr. DOOLITTLE. Well, do you see CALFED moving in a positive direction with reference to

assurance and reliability?

Mr. PAULI. Well, I think that we're all hopeful. And I know that Mr. Dooley said that he was concerned about my comments. I reiterate the fact, that we have stayed at the table. We've continued to participate in the discussions. We're still optimistic that something can work out, but at some point the rubber meets the road, in terms of assurances and reliabilities, and not having the million acres of following. And if the plan ultimately comes out to be extensive volume, we're clearly going to oppose it.

We want it to work. We hope it will work. We need assurances. We need reliability. We need a plan in California that deals not only now, but into the future for all Californians, and all water-users, and for the ecosystems for the fish, and for everything else. And that's what this process is about, a plan that works for everybody, that we all get better together with. We simply don't remove a million-acres of production from California agriculture as the solution. That, we will absolutely oppose.

Mr. DOOLITTLE. Thank you.

Thank you to all the members of the panel for appearing for your testimony. There are further questions. I know Mr. Pombo has some. I'm sure probably all of us have further questions that we will submit in writing, and we'd urge you to respond expeditiously to those questions.

With that, we'll excuse the first panel, and ask the second panel to come forward.

Mr. HALL. Mr. Chairman, with your permission, the issue of water transfers came up earlier in the discussion, we have recently written a rather extensive letter on this subject. I'd like to attach it to my testimony for the record.

Mr. DOOLITTLE. Thank you, without objection, that will be entered in the record as well. [The information referred to follows:]

INSERT OFFSET FOLIOS 1 TO 11 HERE

Mr. DOOLITTLE. If members of our second panel will remain standing for the oath, the three members, panel No. 2. OK, if you gentlemen will please raise your right hands.

[Witness sworn.]

Let the record reflect that each answered in the affirmative.

Thank you. Thank you for coming, and please take a seat. Let's see. Let's focus on our questions from earlier. The second panel, we've asked to address the following questions: one, how are the future needs of California identified through the CALFED process going to be financed; two, since interim funding for the common elements in the CALFED has been provided by Federal authorization, and the California water bonds, are the long-term solutions going to be funded by public-interest groups, by beneficiaries, or by government financing, and three, are CALFED costs going to be born by local communities through unintended program consequences?

Our first witness, Mr. Robert Potter, chief deputy director of the Department of Water Resources, the State of California. Mr. Potter, you're recognized.

STATEMENT OF ROBERT POTTER, CHIEF DEPUTY DIRECTOR, DEPARTMENT OF WATER RESOURCES, STATE OF CALIFORNIA

Mr. POTTER. Thank you, Chairman Doolittle, and members of the Subcommittee.

My name is Robert Potter. I am the chief deputy director of Department of Water Resources. The department operates and maintains the State water project, and develops and updates the California Water Plan. In addition, I serve as the Department's representative on the CALFED policy group.

It really is too soon to get too specific about how we finance the CALFED program, given that we have not arrived yet at a preferred alternative, nor agreed on a plan for implementation. However, it's an appropriate time to start thinking seriously about some of the things that ought to go into whatever the financing plan is. And there's some things that stand out in my mind.

There is some background that I think we ought to consider when we decide how to fund this program. The CVPIA allocated 800,000-acre feet of water away from the cities and farms in California to the environment. The 1994 Delta Accord allocated an additional million-acre feet of water away from cities and farms into the environment. And thus far, there's been essentially no recovery or compensation for those reallocations.

Within the CALFED program itself, it's not clear yet, what quantity of water will be developed or how it will be allocated. Both issues are still on the table.

In terms of principles for how to arrive at equity, most people involved in the discussions and debates have some support for the concept of user-pays. Most people support the concept that the beneficiary should pay. When you look at California, we basically all use water, and we all benefit from California's healthy economy which in major part, is there because of the strong Federal and State water development programs.

Many, many years ago, the U.S. Senate developed a document that was commonly called the Green Book that presented a set of principles for identifying beneficiaries and allocating water development costs to beneficiaries. All of us spent a lot of time agonizing, maneuvering, discussing, and debating how to apply the Green Book and it served us well. But it was not a silver bullet. The CALFED package itself is certainly too complex for us to arrive at some simple formula as to how to allocate costs. The only real answer is to debate and negotiate and probably arrive at a mix of payment strategies tapping both beneficiaries and users. In the long run in most resource issues in this country, we try to arrive at equity and equity tends to drive the decision—not really economics.

In closing, I'd like to assure the Subcommittee that the Wilson Administration is strongly committed to CALFED. Governor Wilson supported Proposition 204 which provided moneys to jump start some of the environmental content of this program. Yesterday, the Governor met—this was mentioned earlier I realize, but it's worth reminding ourselves—that the Governor met yesterday with Secretary Babbitt. They agreed to a strategy for moving ahead on CALFED this year. The Governor at the same time announced that because of the healthy state of the State's economy, in his May revisions, he was able to dedicate almost another \$30 million of the State's budget to the CALFED process. He, at the same time, directed \$170 million to the flood control subventions in California—an area where we've fallen behind in meeting the State's obligation.

The Governor has proposed a 1998 water bond which would provide additional seed money to keep the CALFED process rolling. I would assume that eventually a larger bond or additional bonds will be required to implement the full \$10 billion program that is evolving in the CALFED process.

In closing, I would like to submit for the record the Governor's letter to Chairman McDade and I'm not going to read the letter—I'd like to read two sentences from the letter. "Dear Mr. Chairman, I would like to take this opportunity to share with you California's priorities among the programs funded through the Energy and Water Development Appropriations bill. My top priority continues to be full funding for the \$143.3 million requested in the President's budget as the initial Federal contribution toward the restoration of San Francisco Bay Delta." The letter goes on and identifies other priorities of the Governor's, but I thought it was important that you hear his first priority. Thank you.

[The information referred to may be found at end of hearing.]

[The prepared statement of Mr. Potter may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our next witness is Mr. David Yardas, senior analyst for the Environmental Defense Fund from Oak—from California. Mr. Yardas.

STATEMENT OF DAVID YARDAS, SENIOR ANALYST, ENVIRONMENTAL DEFENSE FUND, CALIFORNIA

Mr. YARDAS. Thank you, Mr. Chairman and members of the Subcommittee. I appreciate the opportunity to testify on the issue of CALFED financing. I did submit a fairly lengthy statement for the record, so I'll attempt to just touch briefly on a couple of points from that now in my oral comments and address specifically a couple of the issues that you identified up front.

Just for perspective, I want to be clear that the Environmental Defense Fund, both on its own part and working through the Bay area-based Environmental Water Caucus is—takes CALFED very seriously and is very much committed to CALFED and the consensus that was—set CALFED in motion through the Bay-Delta Accord to which we were signatory. That doesn't mean that it's easy or that we always see eye-to-eye on some of these matters as you heard on the first panel and no doubt as we'll get into on this one and those that follow. That said, my organization, in particular, views the issue of finance—that is, who is going to pay for what out of CALFED as perhaps one of the most, if not the most, fundamental issues to be addressed.

I have personally spent the—better part of the last 3 years involved in the deliberations of the BDAC Finance Work Group or subcommittee attempting to wrestle with at least two of the issues that you asked: how will future needs be financed, and what about the mix of beneficiaries versus public. How will those issues be addressed? We have struggled in attempting to come up with a consensus on how to proceed on that front. I think it is correct to say that most folks agree that a beneficiaries pays principle-based approach makes a lot of sense. We have expressed some major concerns from the very outset, however, that the fundamental problem with the benefits-based approach taken literally is that it essentially assumes a level playing field from the outset. We are mindful of the criticisms that have been made that looking backward is nothing but divisive and unproductive. On the other hand, we feel that there is a need to take an honest look at how we got to the need for a Bay-Delta Accord and a CALFED process in the first place in order to meaningfully address the important issue of finance and what defines an equitable allocation of costs.

The BDAC Finance Committee, and the CALFED Phase II draft to its credit, identifies an

important question with regard to the benefits-based approach, and that is whether or not any adjustment for past impacts is appropriate prior to using the benefits-based approach. This is a matter of ongoing work in the Finance Committee discussions in particular and I know in CALFED's efforts as a whole. The Environmental Defense Fund certainly thinks that the answer is resoundingly yes—that any reasonable accounting for the prior investments and prior impacts of water development will and must acknowledge that the playing field is not level, that the important funds that have been provided or authorized to-date for ecosystem purposes are a good start but are nowhere near to the point where we've reached a quid pro quo kind of situation, as has been argued in the context of the Governor's water bond proposal, at least prior to yesterday's announcement. (I'm still trying to understand exactly what was announced yesterday and what it means for the pending water bond measure.)

But in any case, where we come out at this point, what we would recommend as a way to move forward, and the position that we've taken in the BDAC discussions can roughly be summarized as follows: That partnership funding, public and user-based funding, ought to be available to fund the common programs of CALFED pretty much across the board. We would support that. That seems like a reasonable way to proceed. However, when it comes to the more controversial issues of new dams and conveyance—large conveyance facilities through the Delta—we feel quite strongly that those should be looked at as new water projects and that they should be paid for by the beneficiaries—the direct beneficiaries, the users—who will benefit from those projects which are made necessary by all of the water development primarily that we've done in the past.

We recognize that not only water development—and particularly the State and Federal projects—can be assessed blame for the past. That's why we supported, joined with our urban, agricultural and business sector colleagues in a somewhat controversial—in our community—push for public funds to the exclusion of user mitigation funds under Proposition 204 and the Bay Delta Act. But that said, we will continue to support partnership work and recommend that funding be provided in that way for common programs, but that—I guess what it comes down and what it reflects back on is the prior panel: Somehow price really matters when it comes to how we perceive moving forward in CALFED. CALFED's about a new way of doing business, and we think that making sure that true cost-price signals accompany newly developed water is a fundamental part of the equation. I'd be happy to go into that more in a question and answer, given that my time is up. So, thank you.

[The prepared statement of Mr. Yardas may be found at end of hearing.] Mr. DOOLITTLE. Thank you.

Our next witness is Dr. Tim Quinn, Deputy General Manager of the Metropolitan Water District of Southern California.

STATEMENT OF TIMOTHY QUINN, DEPUTY GENERAL MANAGER, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Dr. QUINN. Thank you, Mr. Chairman, members of the Committee. Like everyone else, I very much appreciate the opportunity to present some of my views here this afternoon.

My name is Timothy Quinn. I'm Deputy General Manager of the Metropolitan Water District of

Southern California. I would also point out I'm one of five panelists appearing before you today to sit on the Ecosystem Roundtable and have some responsibilities for providing advice about the expenditure of CALFED moneys.

Primarily, I am here, as Tom Berliner was, as a representative of the Bay-Delta Urban Coalition and my testimony has been reviewed by a committee, North-South, so that it would reflect a broader spectrum of interests. I would like to try to be responsive to the questions that you posed to this panel by briefly describing four key principles that the Urban Coalition believes will be important in developing a successful financing plan. They're discussed in more detail in my written submitted testimony.

The first principle is that the finance plan must be founded on a CALFED solution that generates widespread value. The concept is simple. First, create value so that you create willingness to pay amongst the people who are going to be asked to contribute financially. We believe that CALFED, for the first time in a generation, offers the opportunity to create value for the environment and for water users in California. For the environment, we're talking about moving into the 21st century and restoring health to the ecosystem through a historically unprecedented ecosystem restoration investment program. For urban California, substantial improvements are possible in the source quality of our drinking water. We see the possibility of creating a stable infrastructure upon which we will build economic prosperity in the future. For agriculture, we're talking about moving into a new era of natural resource management in the 21st century in a way that sustains and strengthens the largest agricultural economy in the Nation. Those are values that we think people are willing to pay for in California through one means or another. Just as the benefits are widespread, we are firmly convinced that the finance plan must have a diverse source of funds.

The Urban Coalition has long taken a position in favor of user fees as a primary funding source for CALFED solutions, but we also recognize that many of the benefits of a CALFED-preferred alternative are going to be broadly spread and that justifies some participation by State and Federal taxpayers. Exactly how that mix comes together, we're going to have to tackle that question over the next 6 months as we define a preferred alternative consistent with the direction that we're receiving from the Governor and from the Secretary of Interior this week.

I also would emphasize the importance of acting favorably on the appropriations request of the Clinton Administration for keeping the ecosystem restoration elements forward moving.

The second principle is that CALFED must provide benefits at the lowest possible cost. It's not enough to just look at cost allocation. We think this Committee and all others involved in this process have to look hard at the overall price tag. Quite frankly, we believe the \$9–\$11 billion of estimated costs is too high and the urban community is committed to working with the CALFED agencies and others to find the lowest-cost package that achieves the benefits that can be obtained through the CALFED process.

Principle three: We believe the costs should be shared consistent with the beneficiaries pays principle and that costs should be allocated in a mutually agreeable manner. The beneficiaries pays principle—it comes off the lips easily. We believe there's a lot of devil in the detail here. We are extremely concerned that an arbitrary or academic application of that principle could backfire and upset the whole process. For that reason, we're recommending that the beneficiaries pays principle

be implemented to the maximum degree possible by coming up with mutually agreeable allocations of cost. We think that approach will give those who are expected to help pay a voice in defining whose benefiting and by how much. We think it will produce the best alignment of benefits and costs. In the end, it will underscore the importance of assurances to all the parties as we move forward to a preferred alternative.

The final principle—somewhat in counterpoint to the point made by Dave Yardas—is that we believe the finance plan must be based on a prospective assessment of value and not on a retrospective assignment of blame.

To be successful, CALFED has to look forward. We don't think it's possible to agree on who's responsible or who should be blamed for what problems are in the system today. More importantly, we think the debate itself is counterproductive. Blame does, we think, lead back to divisiveness and to the gridlock that CALFED gives us the opportunity to leave behind us. We would urge that financing decisions be made on the basis of prospective assessments of who's going to gain value from the implementation of a solution and who's going to help pay for that solution.

Let me close on an optimistic note. We believe there's an enormous opportunity here for creating value for California, for agricultural and urban water users and for the environment. We think that there's a lot of work to be done, but that by the time we get to the end of this year, we will have an agreeable financial plan that backs up a preferred alternative that's going to benefit California as we move into the 21st century.

[The prepared statement of Mr. Quinn may be found at end of hearing.]

[Discussion follows.]

Mr. DOOLITTLE. So, Dr. Quinn, you actually believe you'll have that by the end of this year? Dr. QUINN. I think we'll have principles that define a financial plan consistent with the direction we're getting from the Governor and the Secretary of Interior. That they would like to come to some agreement on a single preferred alternative by the end of the year. I would point out that I'm known in the water community as quite an optimist.

[Laughter.]

Mr. DOOLITTLE. Thank you.

Dr. QUINN. My optimism has proven justifiable on many occasions in the past, however.

[Laughter.]

Mr. YARDAS. What we sometimes use is a slightly different term—but that amounts to the same thing.

[Laughter.]

Mr. DOOLITTLE. Mr. Potter, what's the average shortage—in an average water year—what's our shortage, according to your department?

Mr. POTTER. I believe you quoted the number earlier—that about—I don't have 160 in front of me and I don't do a very good job with numbers, but I think that number is right.

Mr. DOOLITTLE. OK. I think the figure I quoted was 1.6 approximately and in a drought year, it's 5.2 presently. So anyway——

Mr. POTTER. Those are consistent with my recollections. I don't—I didn't bring the bulletin with

me.

Mr. DOOLITTLE. OK, could you check on that and verify it—

Mr. POTTER. Certainly, certainly.

Mr. DOOLITTLE. [continuing] for the Committee?

Mr. POTTER. Could I comment just a little bit on the 160 process itself?

Mr. DOOLITTLE. Yes, that's a good-

Mr. POTTER. You know, the State developed the California water plan in 1957, published it and it was adopted by our legislature. At the time it was agreed that it would be periodically updated. The Bulletin 160 series is the series in which we do those updates. If memory serves me correctly, the first update was in the 1960's—some 35 years ago or so. I think this is either the sixth or seventh update. It's easy to go back and take a look at whether or not our crystal ball has been any good. Sometimes we're high and sometimes we're low. In the final analysis, we're guessing the future—there's an old Arab proverb to the effect that he who foretells the future lies even if he's proven correct. I mean, it's a real problem to try to look ahead. Well, we did however, have a very comprehensive process. We had a 30-member citizen advisory committee. We had a public hearing process chaired by our California Water Commission. We feel comfortable that we've done the best job we can with the facts in front of us on foretelling the future on California's water.

Mr. DOOLITTLE. I guess this is getting to the third question, but does the Wilson Administration support the fallowing of land as you've heard it described in the CALFED? I mean the estimates were from roughly 400,000 up to nearly a million acres of land?

Mr. POTTER. I'm going to try to give you two different responses to that. First, certainly it's not department policy or State policy to fallow land to make water with some exceptions. I was one of the key administrators of the Governor's 1991, 1992 and 1994 water banks. In 1991, we did fallow extensive land to make water available in the drought emergency. We paid farmers not to farm. For the farmer and the water users, it turned out to be a good experience. For some of those people that experienced third-party impacts, it wasn't such a good experience. In 1992 and 1994, we did no fallowing. I'm not saying that we wouldn't come back and fallow again in a serious drought because we might well do that. But we are still taking a tremendous amount of criticism throughout the Sacramento Valley for some of the impacts of that first water bank. There is no State policy that supports the concept of fallowing to make water available. There is a Federal CVPIA program in which the Federal Government can fallow land to provide water.

Mr. DOOLITTLE. So the State would only support that then—if I understood what you said—is an extraordinary response to an emergency?

Mr. POTTER. In any specific point and time basis—not on a permanent fallowing program.

Mr. DOOLITTLE. Not on a permanent basis?

Mr. POTTER. That's correct.

Mr. DOOLITTLE. OK.

Mr. POTTER. I should say in fairness, I think that the CALFED program has taken a bum rap on the fallowing issue. In reacting and working with their advisory council, they did some exploratory analysis and evaluations of what might happen if you fallowed a bunch of land. But they do not have in the CALFED program fallowing to generate water per se. There's nothing in there to that effect.

There's some land conversion to support their environmental restoration program and there's some land—some agricultural land conversion to support some of the levee setbacks in the Sacramento/San Joaquin Delta. But there is not an item in the CALFED package to fallow land to generate water.

Mr. DOOLITTLE. Have you been with the Department for a number of—when—how long have you been with the Water Resources Department?

Mr. POTTER. If you were closer to the pen, you'd see a 40 on it—

Mr. DOOLITTLE. Forty.

Mr. POTTER. It will be 41 years in June.

Mr. DOOLITTLE. Well, do you—are you proud of what has been accomplished in those 40 years or do you feel guilt-ridden over what has happened?

[Laughter.]

Mr. POTTER. I'm certainly proud of what the Department has accomplished over the 40 years. I'd like to avoid my personal record here, if we could.

[Laughter.]

Mr. DOOLITTLE. Do you feel, Mr. Potter, that additional surface storage is going to be necessary in order to meet our present and long-term water needs in the State of California?

Mr. POTTER. Well, one of the things that I think is that the CALFED family—all 15 agencies have come to recognize as they've tried to arrive at resolving the Delta problem. That is their charge. Their charge is not to try to balance all of California's water needs in the foreseeable future, but rather to resolve the Delta problem. Just in that relatively narrow view, they have concluded that there is no escaping some additional storage if we're going to add to the water supply pie.

Mr. DOOLITTLE. OK, well my time is up. Mr. Miller, your turn.

Mr. MILLER. Thank you, Mr. Chairman. Mr. Potter, let me just say I appreciate your comments about the annual—the 5-year reviews under the process by which you—which people—the State arrived at 160. But I think on a previous panel, Ms. Davis raised some fairly concrete arithmetic questions here. That either the water usage in South coast was 4.3 or it was 3.5. There's a world of difference between those two—especially if that's what you're building a base on, you know. As she pointed out, there are reasons we want to normalize some of these figures and the process you go through. And the question of whether in the South coast region, is there really a .5 million acre feet of conservation to be developed there or is it 90,000 acre feet? There's a world of difference between those two when we start apportioning out what this plan should contain, what it should look like and who pays.

It seems to me there has to be some attempt at resolution of some of these issues. Just like, you know, sort of like people ask for good science. If there's a mistake, we ought to seek to correct it, or explain it or disavow it or whatever—however that turns out. Again, I'm not suggesting that this is all right and 160 is all wrong, but as we start to build on these determinations, I think it becomes very important as to where we stand with those.

Mr. POTTER. I certainly agree. I don't really have the information or the skills to get into detail here, but I had a couple of reactions as Martha was talking and will certainly talk more with her. But one of the things in 160 is we do two things. I mean, we do say what's possible and then we arrive at

what's probable. It doesn't surprise me that there are situations where we have estimated a large potential water conservation piece and then ground into the program a smaller number because we thought that was what was going to happen.

I believe in the 160 process, we have gotten plenty of criticism in both directions in terms of our water conservation program. Because of the controversy that has been stirred recently by the bulletin, I've talked to the staff about their public hearing process—which I was not personally involved in. But they have been basically criticized in both directions. "You've got more water conservation in here than anyone can ever possibly accomplish, or hey you guys are ignoring water conservation."

If you go back to the Governor's water policy of 1992—when Governor Wilson came in, we were overwhelmed with drought. In terms of water—that's where his attention was focused for the first year. By 1992 he turned to a long-term water policy and if you look at that water policy, it is basically a policy that has a broad menu of both demand management and supply augmentation—concludes that we need to attack both menus. But says in effect that over the next few years, our focus ought to be on fixing the Delta. Fixing the Delta isn't just about meeting the State's future demands, it's also about protecting the estuary.

Mr. MILLER. Well, thank you and I just want to raise that because I think it's a point that has to be brought to some resolution—you know, in the next coming months.

Mr. Yardas, let me go back to your testimony. On page eight you describe what this combination as a public end use base relationships between ecosystem restoration, new surface, storage, conveyance facilities and so forth. Where are we—I mean—I guess—you know, earlier last month, this Committee heard from some people who were beneficiaries who said they are paying about all they can pay for water in the agricultural community. I guess, in my district, they might think that too after they built Los Vacaros. City of San Francisco can say well we're not—we're supportive of all this, but we have our stream of supply for the time being. I mean, the description of beneficiaries is going to be as difficult as apportioning the cost—it seems to me. Because some people are going to say—gee, you know that doesn't impact us. In San Diego, we're paying all we can pay down here. This recharge up there—how do you get through this thicket. I mean, that's why some people say you just turn to general obligation bonds and everything is on the calm here.

Mr. YARDAS. Well, on this point, in some ways, Dr. Quinn and I may not be so far apart in that kind of what's come out of the deliberations of the Finance Work Group is that we're going to need to figure out some way to move forward recognizing that the question of bright lines between beneficiaries will be difficult. That you have some financial and a lot of nonmarket benefits that are difficult to compare. That looking backward can be problematic whether you stop at 1992 or whether you go back a few years before that. So part of what we're trying to put forward in our recommendations and the ongoing discussions of the CALFED Work Group on finance is a forward-looking alternative. I described a current draft document at the bottom of page five and top of page six on my written statement that's currently in progress and will be the subject of review at the BDAC meeting—or at least discussion and briefing—on Thursday of this week.

From our point of view, the bottom line is that in order to move forward, the cleanest way to do it is in a sense to view the common programs as a kind of mitigation and restoration program for the

existing system. Then to the degree that new projects come online—OK, but those ought to be user-financed. They ought to include all of the environmental and nonmarket mitigations that have not been part of our conventional water development system, that have helped to understate prices, inflating demands, over building a system relative to what would be affordable if those who—if we were really pricing the next acre foot of water at what it costs broadly defined to develop it and provide it. So did that make sense? [Laughter.]

Mr. MILLER. Yes, in this room it probably makes sense.

[Laughter.]

I'll go back around when Mr. Doolittle's done.

Mr. DOOLITTLE. I'm going to recognize Mr. Pombo who I think is right outside the door there.

Mr. MILLER. OK. Well in the interlude I would just say that, you know, it's amazing when we started putting cost-sharing on efforts here. All of a sudden the local demand for some of these projects when the Federal Government was providing 100 percent of financing, they just somehow weren't as worthwhile the next year as they were when, you know, when they had 100 percent financing. I mean, there is some market test to some of this in terms of when you're windowing out—what's in and what's out.

Mr. YARDAS. Well, I think the point you made about the comments that were made at the hearing in Fresno relating to flood waters currently being too expensive because of the environmental fees that are attached to it— I mean, that's water that's going to be available at a fraction of the cost of newly developed water that would presumably have to capture that same flood water. So, it kind of—those who are major proponents of those alternatives are inherently saying I think they're expecting someone else to pay for it—if in fact that's a viable alternative for them. In the north valley, already we have payment capacity waivers provided by the Bureau of Reclamation on the environmental fees because they're not affordable by the Bureau's calculations and policy. How do those—where does the beneficiary-based payment come into play there?

Mr. MILLER. Thank you.

Mr. DOOLITTLE. Pending Mr. Pombo's arrival. Mr. Yardas, do you recognize—it seems like we're almost talking about this system as if it never changes. But, I mean, it is an ecological system and those do change over time—don't they?

Mr. YARDAS. I think all healthy systems are dynamic. Yes.

Mr. DOOLITTLE. Well, if it is dynamic, can you tell us how could one mitigate impact caused by a dynamic system?

Mr. YARDAS. Mitigate impacts caused by a dynamic system?

Mr. DOOLITTLE. Well, or happening to a dynamic system.

Mr. YARDAS. I think that what we're trying to get at is some effort to ensure that—I mean, there are clearly costs associated with the use and development of water. There is habitat that's no longer accessible. There is water quality degradation due to pollutant runoff. There is depletion of the system itself and its implications for the mixing zone, and so on. I mean, there are lots of identifiable impacts associated with water development and use that have impacts and costs on the ecosystem.

Mr. DOOLITTLE. But those are positive, as well as negative, aren't they?

Mr. YARDAS. Which are the positives?

Mr. DOOLITTLE. Well, you'd have water available flowing down the stream that wouldn't ordinarily be there if it were just left up to nature.

Mr. YARDAS. Like the cold water releases at Shasta?

Mr. DOOLITTLE. Well, like having water available at say—to name an example close to our home in the lower American River.

Mr. YARDAS. Yes. I think any honest look at the indicators of the health of the ecosystem—whether it be the extent of habitat that remains, the amount of unfragmented habitat, the status of the populations of fish or waterfowl species—Waterfowl have improved substantially in recent years—thanks to the CVPIA, in particular—but any honest assessment would conclude that we've spiraled down pretty far, pretty quickly in the last 20 to 50 years or so. For—in large part because of the water development that's taken place. To say that the system would be exactly as it was 50 years ago—no, I wouldn't say that. But I think it would, absent water development, be substantially similar.

Mr. DOOLITTLE. But is there no positive benefit you recognize from the projects that have been built?

Mr. YARDAS. Oh, I think Central Valley agriculture is incredible. I think the California economy is amazing. There's absolutely—there are benefits associated with water development.

Mr. DOOLITTLE. So at least you'll acknowledge the human species is part of the environment.

Mr. YARDAS. Absolutely. I'm one of them and I enjoy those benefits. I don't condemn them. [Laughter.] I'm merely saying I think we ought to include the costs of our actions in the price that we pay so that we know that we're fully accounting for the impacts of our being here.

Mr. DOOLITTLE. I'm going to recognize Mr. Pombo.

Mr. POMBO. Thank you, Mr. Chairman. Mr. Potter, I want to give you an opportunity to clarify the statement you made on land conversions or land retirements. You said that there were no water benefits associated with that. That it was the position of CALFED that you weren't retiring land to create water. Just clarify your answer.

Mr. POTTER. Well, let me clarify my position for a minute if I can. I represent one agency—15 of whom run CALFED and you really ought to put this question to Lester when you get him up here. But what happened—my understanding of what happened sitting on the policy group now and not necessarily grinding the mechanics of the process—but my understanding of what happened is that the BDAC forum, the CALFED staff was asked to generate how much water could be saved by retiring some agricultural land. They threw out some big numbers—500,000 to 900,000 acres. There was sufficient reaction both within the committee itself and in the general public that that concept of retiring the land to make the water was withdrawn and is not a part of the CALFED program. There are land conversions in the program—in the environmental restoration program, and in the physical works—some of the delta levees are proposed to be straightening, some of it straightened, some of the channels widened. That sort of thing does have an adverse impact on agricultural land. Retire some agricultural land but not for the purpose of generating the water, but rather for the purpose of ecosystem restoration or having a more reliable levee.

Mr. POMBO. The low number I've heard is 250,000 acres. The high number, as you've

mentioned and has been testified to, was close to a million acres. According to the CALFED document, the land necessary for facilities ecosystem restoration and water quality could range from approximately 75,000 to 140,000 acres. So the difference—even if you take the low numbers—there's an additional 100,000 acres that would be taken out of production.

Mr. POTTER. This is a copout, but I'm going to ask you to either drag Lester up here now or save this for Lester.

Mr. POMBO. Well, I'm going to ask him, too. I just—I mean, you testified—

Mr. POTTER. I'm not sufficiently informed—I'm not sufficiently familiar with the specific numbers to have this conversation. I'm not ducking. If I knew the answer, I'd provide it. I simply don't know the answer.

Mr. POMBO. I appreciate that answer and I believe that that's an honest answer. It was just in response to the Chairman's question—you said that no land was being retired to generate water and I believe that is an inaccurate statement—even if you just read CALFED's documents only.

Mr. POTTER. Just a comment. I attended a public hearing for the CALFED program in Walnut Grove the other night. There is a tremendous amount of upset and concern in the farming community in the Delta. Because they feel that the ecosystem restoration program and the levee work to some degree has them paying a much larger portion of the hit on land conversion. It's something that we're all going to have to better understand if we're going to make it through the process. I don't think that we gave—well I know that we did not give them good answers that night because we simply didn't have them, but sooner or later those questions have got to be answered.

Mr. POMBO. Well, that is a point that I will bring up with Mr. Snow later is the answers to the questions at Walnut Grove. I'm glad you had the opportunity to visit my district because all of those people make a habit of calling my office and visiting my office with their concerns about this process. To go back—and since we started on that point—I would like to go back just briefly and ask you about a development of new water sources. Just asking you simply would—do you believe that any plan that's looking at 20 or 30 years out in the future that does not realistically identify new water sources, new surface water availability is going to accurately deal with the water problems that we have in California currently and where we're going to be 20 to 30 years from now.

Mr. POTTER. I guess the short answer is no, I don't believe that. I do think though it is important to draw a distinction between meeting the overall statewide water balance. The charge—my understanding of the charge that Lester Snow has been given which is basically to arrive at sufficient knowledge and understanding to develop a program that will protect the Delta estuary. We didn't ask Lester to solve all of California's water problems. We asked him to see if he could lead us through the Delta dilemma.

Mr. POMBO. Well, I understand that Mr. Potter. But I think any plan that does not look at developing new water—surface water resources for the future—is totally inadequate in protecting the Delta. Because every time someone needs water, they stick another straw in the Delta and they suck more water out of it. I grew up out in the Delta. I can tell you——

Mr. POTTER. Me, too.

Mr. POMBO. [continuing] just as well as anybody here about the water quality problems that we have in the Delta today versus what we had 20 years ago. There's a big difference. A big part of that

is that we keep sucking more and more and more water out of there and we're not developing any new water. One of my major concerns with this process is I believe that the development of new surface water resources has been given the short script in this development. We talk about all these wonderful things of retiring 1 million acres of land and creating these wetlands and doing all these things, but that's not going to be enough to deal with the future. That's not going to be enough to deal with the water quality problems that we have.

Mr. POTTER. I think CALFED has come to the same conclusion that you have. There is storage in all three of our major alternatives.

Mr. DOOLITTLE. Mr. Miller has an additional question, I understand. You're recognized for that purpose.

Mr. MILLER. Mr. Yardas, let me again—as I understand taking into account what the Governor and the Secretary—correct me, Mr. Potter, if I—they announced to extend the comment period and then come up with a draft proposal—a second draft, obviously windowing out a lot of things that you've heard here back and forth from across the State. Then there would be an additional comment period—is that correct?

Mr. POTTER. That's correct. That's correct. I wasn't there yesterday. I was on an airplane trying to get here.

Mr. MILLER. Yes. Apparently, none of us were, so we're trying to figure out what that was. But if that's correct, Mr. Yardas, let me ask you this. At some point, you decide some approach to one of these three alternatives or probably a hybrid of one of them given the comments and everything that's learned in this process. But is there a point where we start to attach when you think about the financing and the preliminary discussions—I'm going to ask all three of you actually. Is there a point where we start to attach beneficiaries to particular projects in this thing? Or are they seen as, you know, as part of the whole? If you look at the enlargement, Millerton or Montgomery, possible expansion of Los Vacaros, and what happens with the islands in the Delta, for what purposes—is that drinking water or is that agricultural water or what have you? Do we start to lock onto who the beneficiaries are here at some point? If you choose, beneficiaries pay or in combination with the public financing and then decide whether there's a go or no go—or do we just sort of attribute characteristics to these? Where's the apportionment? What's the financing committee thinking about this?

Mr. YARDAS. Well, again, it is difficult to draw bright lines between these various beneficiary groups. I mean, in some cases it's clear. If there's additional yield—I would say there is no new water to be had in the system but there may be additional yield to be developed—carried over from wet periods into dry periods. That will go someplace. That's pretty easy to track. On the other hand, water quality—a much more nebulous concept and much harder to figure out exactly what's going on. As you heard earlier, the ecosystem restoration program, there are water supply benefits very much involved in what's going on in implementation of that program right now. So, it's very difficult in most cases to define very clear lines.

I think the focus of the Finance Work Group in recent months has been to try and get beyond both the assignment of blame and the strict definition or quantification of benefits into a kind of more proactive or forward-looking approach. The gist of that is that the common programs would receive

partnership funding, but that storage and conveyance would be paid for by the users of those facilities. Now that would be the recommendation that we would have. I don't think the Finance Work Group is there yet, but that's the proposal that's kind of——

Mr. MILLER. But that's the process you sort of envision—is that close to the process that you envision how to——

Dr. QUINN. Yes, that's why I'm pleased at how close it is to the process I'm envisioning. Some cost elements will be identifiable to a beneficiary. I don't think a lot of them will, but some of them will. Metropolitan recently financed an integrated resources plan where we're spending billions of dollars on a combination of investments, including reclamation, conservation, water marketing, and transportation and storage projects. What we found to be a successful approach—in some cases, there were clearly identifiable benefits which we just put right into our regular rate structure. You paid for it if you got the water delivered. In other cases, the way we approached it was to focus on what kind of a package will maximize the value for the region.

In this case, we were thinking only of southern California. Here you're thinking of a much broader geographic area. Then we started going to our member agencies as constituents—pointing out the value that they would receive from increased reclamation in Central and West Basin. Part of the value is we could downsize our capital program. Everybody saved money if we could reduce expenditures on the capital program, and we eventually came up with the Local Resources Program where all the member agencies pay \$250 an acre foot to those member agencies who are able to invest in local resources. In general, for much of the financing of the IPR, we did not attempt to draw lines from one specific piece to somebody that's going to benefit. Instead, we focused people on a package that would generate value, and then worked with them to make them understand they're getting value. And eventually, people would not want to argue so much over the pennies. They were willing to stand back and look at the broader picture, and we were able to get to a successful conclusion.

I think something very much like that needs to happen here—to stand back and start focusing on a package that can create value for each of the interests throughout California. Where can you generate value and then start to generate interest and willingness to pay, which, of course, was the theme I tried to put in the Urban Coalition testimony I presented today.

Mr. MILLER. My time has run out, but there is a little bit of a difference in your answers there.

Mr. YARDAS. Well, I guess I would just say, though, where this will get difficult is in the notion that the environment needs new dams to get healthy, and we just don't agree with that. I don't know if that's part of what Tim was saying in code, or not. It's certainly part of the analysis that CALFED is doing, and we just don't believe that that's properly—that the environment needs it. Or, if there are so-called benefits ascribed to the environment, that those ought be financed by the public. Those are very much tied to water use and water development and ought to be properly financed by those who benefit directly from those facilities.

Mr. MILLER But under Tim's answer, you could have—you could ascribe those as benefits that the broader community leaves, it gets, and lay them off in that fashion.

Dr. QUINN. Let me emphasize. I'm not trying to be opaque here. We believe, not only Metropolitan, but pretty broadly in the urban community, that the future lies in a combination of

investments and new infrastructure, new system capacity, including both surface storage as well as ground water storage, as well as better allocation mechanisms through more effective water markets.

We don't think the answer lies at either polar extreme. At one extreme, relying on zero percent storage and one hundred percent reallocation through the market. Or the other extreme, relying solely on new storage with no increased reliance on market forces. The urban coalition believes we need to start talking about what is the proper combination. Some of the storage that's on the table is off-stream storage that we believe could be very valuable to the environment as well as to the water users. It's not as cheap as the storage we were building 30 or 40 years ago, but it is relatively affordable. I mean, if somebody walked in my door and said I've got a deal for you—here's a block of several hundred thousand acre feet that's going to cost you \$200 an acre foot for protection in dry years—I'm interested. And the fact is some of the storage that's on the table in the CALFED process meets those economic criteria. So, I stand back and I say, if you were designing the whole system yourself, what makes the most sense as an economic package? And I've changed my own views about storage. At one point, I was not interested in storage. I thought it would cost too much. The facts have changed my mind. It's very clear that storage has a legitimate place in this debate, and we think it's likely, in proper combination with the other elements, to make sense in an overall package.

Mr. MILLER. Thank you.

Mr. DOOLITTLE. So, Dr. Quinn, you would go for storage that produced water at \$200 an acre foot?

Dr. QUINN. I would certainly not throw somebody out who proposed a water supply at that cost.

Mr. DOOLITTLE. Well, there. That's what you just said. What are you hedging for?

Dr. QUINN. Let me—let me—the answer—

Mr. DOOLITTLE. You just said you would go for storage. Are you standing by that statement or not?

Dr. QUINN. The answer is yes.

Mr. MILLER. If you do, it's something he wants to sell you.

[Laughter.]

Mr. DOOLITTLE. The problem is we don't have any to sell. We got to have it all for ourselves. But was it your testimony that you would go for a deal that offered you water at \$200 an acre foot?

Dr. QUINN. I believe that storage—environmentally sound storage that can make water available during dry times for \$200 an acre foot——

Mr. DOOLITTLE. Oh, no. I didn't hear all of that in that first statement. What do you mean environmentally sound storage?

Dr. QUINN. Well, I mean storage-

Mr. DOOLITTLE. What's an example of environmentally unsound storage?

Dr. QUINN. Well, can I turn that question around? An example of environmentally sound storage is storage that can survive the permitting process.

Mr. MILLER. Ah, you want to go through the dance? [Laughter.]

Mr. DOOLITTLE. Well, let's just leave it at that.

[Laughter.]

The figure of \$200 an acre foot, you find, as did the Metropolitan Water District of Southern California, to be an attractive price. Is that right?

Dr. QUINN. It's competitive.

Mr. MILLER. We ought not to—let's not make this a policy statement of the Met at this stage. But I think, if I might, Mr. Chairman, he was saying that if this—you say, yeah, you might be interested. There are people who would be interested in water at that rate if that could be done. You know. You show me that it's equal to—

Dr. QUINN. Just for clarification, you can't throw storage out on purely economic grounds, because it costs too much. It does not. There may be other grounds for this project or that project, but it clearly can earn its way into a lease cost program from our perspective.

Mr. DOOLITTLE, OK.

Mr. Pombo, would you like to ask some more questions. By the way, the first vote is at 5:30 p.m., and all votes are finished at 6 p.m. And we've got two more panels to go through. I'm just telling me that as well everybody else.

Mr. POMBO. No further questions, Mr. Chairman.

[Laughter.]

Mr. DOOLITTLE. You can ask one or two. That's all right.

Mr. MILLER. It's not that they weren't important.

Mr. DOOLITTLE. OK. Well, we will have those supplementary questions submit. I would like to thank the gentlemen on this panel, and we'll hold the record open for what we hope will be your prompt responses. And with that, we'll excuse you.

I'm going to propose an ad hoc change here. We're going to ask panels two—three and four to come up together to form one panel of five people.

OK, it's six people. In other words, all the members of panels three and four. Have we got them all there? OK, when you have got seats for everybody. All right. Sorry for that, but that will expedite your planes, for those who have them, and our needs here. Let me ask you. If you—let's see. We got everybody there? If you six gentlemen, there we go thank you. If you will raise right hands, please.

[Witnesses sworn.]

Thank you. Let the record reflect that each answered yes.

We appreciate your coming, and for these two panels, I'll just review the questions and you can just answer the questions you are asked to answer. OK, here's for the third panel. How do you evaluate the effectiveness of the funding we are providing? One. Two, what clear and unambiguous performance standards are being adopted to determine if we are close to success or have achieved success? And three, are we going to postpone any major program decisions or alternatives until we have the results of the early phases, or are we going to agree on a basic blueprint and simply adjust it through adaptive management, as we move along? And then, the fourth panel had one question: Is the public given ample opportunity to participate in the CAL—excuse me, two questions—CALFED process? And two, how have we institutionalized a process to ensure that

local landowners are fully appraised of potential program impacts? Have we institutionalized a process to assure that local landowners are protected from government manipulation of property values as part of the habitat rehabilitation program?

With that, let's begin with Mr. Lester Snow, executive director of the CALFED Bay-Delta Program.

STATEMENT OF LESTER SNOW, EXECUTIVE DIRECTOR, CALFED BAY-DELTA PROGRAM

Mr. SNOW. Thank you, Mr. Chairman, members of the Committee.

My name is Lester Snow, executive director of the CALFED Bay-Delta Program, and my excitement to testify has grown considerably over the last couple panels, so——

[Laughter.]

I actually would like to start off with a couple clarifying points before I get to answering the specific questions because I think they're important issues.

One, I want to make it very clear that none of the proposals contained in the CALFED draft that is on the street contains ag land fallowing for the purposes of demand management or generating water supply. We have identified a number of actions that have, as a consequence, ag land conversion for the purposes of habitat restoration, water quality improvement, levy improvement, and certain water supply related facilities, but not as a demand management tool.

As a means of disclosure in our environmental document, we have estimated a maximum footprint, or a maximum impact associated with these activities; and that is approximately 380,000 acres. I do not know where a number of 1,000,000 acres of ag land impact in the CALFED Program has originated. It is not in our documentation.

Even with that maximum footprint, we are working with the communities and affected parties to avoid impact, reduce impact where it's unavoidable, and develop mitigation measures where you must proceed with some impact. But I must make it clear: We do not have ag land retirement as a water supply development strategy or a demand management strategy.

The second issue that I think is important to clarify is if we define the mission of CALFED as getting everyone to agree on 20- and 30-year projections, we will fail for two main reasons: all projections are wrong. Some are just worse than others. Getting all the parties to agree on 30-year calculations about California water issues is a lifelong career. It will not get us where we need to go. And where we need to go is developing a strategy that will allow us to manage a complex natural resource system in the face of uncertainty. If the issue was one of selecting the perfect computer model to project where we are going, we would not be here today.

Rather, the challenge is developing a package of actions that address the diverse issues and that are tied together so that you can't build a subsidized reservoir and abandon conservation and reclamation. Or you can't restore ecosystem and levies, and let water supply reliability continue to deteriorate.

The challenge is in tying the package together and not focusing on the single issues that have torn us apart in the past.

In terms of beginning that effort, we are now proceeding with ecosystem restoration, which is the

critical issue before us. The issue has been raised, how you monitor and how you proceed to judge whether you are making progress, and how if—if you are making the right choices.

The approach that we are taking in the CALFED Program is twofold, and I will make reference to the briefing document that we have provided you: the tab marked "monitoring and performance standards" and the last page which is a figure one, and shows the five levels of performance measures that we've identified in the program. We've divided those into project monitoring and ecosystem monitoring.

In project monitoring, which is at the bottom of the page, there's basically two parts: implementation monitoring and effectiveness monitoring. As we begin spending money, we have implemented this stage of our monitoring program.

Implementation monitoring is straightforward. Has the project done what it was supposed to do? If they were putting in a fish screen, did they actually do it on time and on budget?

The second component of project monitoring is effectiveness monitoring? Did the fish screen allow the fish to pass? And in the example that we use move up Butte Creek to spawning in the number and at the time that's appropriate for salmon recovery?

And then we move to the issue of ecosystem monitoring. How do each of these projects, whether it's coral dam or any habitat restoration project or other screening projects in the Sacramento system, how do they cumulatively affect the overall ecosystem? We are developing indicators of ecological health, and have developed some. They provide us perspective on performance standards for overall ecosystem which lead up to an overall goal. We have developed some specific indicators that tie into the specific projects, such as counting the number of returning spawning salmon, counting the number of out migrants that go back out to the ocean, and seeing how they relate to overall salmon population levels.

Again, we have developed the project monitoring level that is being implemented on every single project that is awarded and moves out. We are developing the longer term program that will be able to provide us the assessment of the cumulative impact of each of these individuals projects in improving the overall health of the ecosystem.

Thank you.

[The prepared statement of Mr. Snow may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

The next witness is Mr. Richard Golb, the executive director of the Northern California Water Association.

Mr. Golb.

STATEMENT OF RICHARD GOLB, NORTHERN CALIFORNIA WATER ASSOCIATION

Mr. GOLB. Mr. Chairman, thank you. Members of the Subcommittee, I appreciate the opportunity to testify this afternoon.

I am Richard Golb, the executive director of the Northern California Water Association. In the interest of time, I'll summarize my remarks as briefly as a I can. I would appreciate the inclusion of my written testimony into the hearing record today.

Mr. DOOLITTLE. This is a full statement. It will be included.

Mr. GOLB. Thank you, Mr. Chairman.

At the outset, I think the simplest way to assess the question of how can we determine whether CALFED has been effective or not in allocating funds to the ecosystem is to just look at CALFED's statement of goals, objectives and principles. In terms of the definition of the program itself, the goal is to improve the environment and, at the same time, decrease regulatory mandates on water supply operations and the water projects. And from a broad level, I think if we accomplish those two goals, we have achieved a measure of success.

Now, on a more specific level, as Lester indicated, I think we can look at specific projects. For example, we can identify clearly established problems in the system, such as water diversions that harm threatened and endangered fish. If we identify those diversions that are harming fish species and we install a fish screen on that diversion, we've solved a problem in the system. And we've basically been effective in at least resolving one clearly identified problem.

At this point, there are nearly a dozen water suppliers, agricultural water districts in the Sacramento Valley, that are engaged in the study, design, or construction stages of developing a fish screen or fish passage project. Several of these projects are now complete. For example, as Lester indicated, on Butte Creek, there's the Gary N. Brown Butte Creek Siphon Project, which Western Canal Water District just recently completed—an amazing project. The district completed the construction of a siphon to carry water supplies underneath Butte Creek, which allows spring-run salmon, now listed by the State of California and proposed for Federal listing, unimpeded access of Butte Creek. Just stop for a second and think about it. You have farmers that voluntarily participated in a cost share to remove several small dams. That's not happening in a lot of areas of the country, and I think that case clearly illustrates the benefits of these restoration projects and the effectiveness, in that we did we achieve restoration at the same time local farmers and the local community benefited through a more dependable, reliable water supply, which is a really a mutually compatible goal.

Now, in response to the performance standards that Lester is now developing, we haven't had a chance to fully assess them. When we do, we'll probably have additional comment. But I think, as you indicated Mr. Chairman, developing performance and monitoring criteria is extraordinarily difficult on a complex and dynamic ecosystem like the California's Bay Delta. It's continually changing. And, at the same time, because it's not a static process, because it's dynamic, there are factors in the entire watershed that create difficulties for us to assess. For example, wildfires in the Sierra or the Shasta watershed, drought, such as the 1986 to 1992 drought, or the 1997 floods, which was the worst flood in California history; and a flood that swept millions of juvenile salmon prematurely out to the Pacific Ocean.

Those kinds of natural effects make it extraordinarily difficult for us to determine the type of standards we should apply on whether or not the program itself has been successful.

An additional difficulty is that CALFED has ambitiously defined some of its projects as an attempt to replicate natural processes. The river meander is one. This project although, from a theoretical perspective, has great value, there are number of questions that arise from allowing the river to meander. You know, rivers are beautiful until they meander through your living room. And one of the

things that we have to be very careful about is that the river meander projects are constructed in such a way that they're consistent with flood control protection.

In conclusion, I would say that I think we can accomplish some of these projects—ecosystem restoration projects—but they have to be done carefully. We've recently encouraged CALFED to focus its efforts on solving known environmental problems, like fish screens. And, at the same time, when it come to dealing with projects like the river meander to be very careful and to consider the implementation of pilot projects so that we deal with them in the right way. We complete NEPA and CEQA certification process. We have representative processes for landowners to participate, because this thing necessarily will require land acquisition along the river. And finally, I would say that the best way to look at this is, if CALFED focuses on known problems and moves the unknown solutions to a longer process of evaluation, what we'll implement ultimately is more dollars up front for restoration projects that will produce more quantifiable benefits, which I think is our goal.

So, in conclusion, we support the appropriation and would urge you to continue your focus on CALFED. It's been helpful throughout the process for all the stakeholders, ourselves included.

[The prepared statement of Mr. Golb may be found at end of hearing.]

Mr. DOOLITTLE. Thank you. Our next witness is Mr. Gary Bobker, senior analyst with the Bay Institute, San Rafael, California.

STATEMENT OF GARY BOBKER, THE BAY INSTITUTE

Mr. BOBKER. Thank you, Mr. Chairman, members of the Committee.

Like Rich, I'll try to summarize my statement and ask that the written statement be incorporated in the record.

Although I'm representing the Bay Institute here today. I also want to mention that I'm the co-chair of the Ecosystem Roundtable, and the perspective that I want to cover reflects work that I've been doing over the last few years in the Roundtable and other stakeholder processes to try and build greater consensus around ecosystem restoration and the broader water management planning process. And I think that what's amazing is the amount of success we've had in the extremely difficult and often adversarial process. We have to look at the relative amount of success, and I think it's impressive.

I think it's important to remember that in looking at the Bay Delta and California's water-related environmental problems that we have changed, altered, and assaulted the California Bay Delta and the water environment to a scale that has really has been seen in very few places in the world. And, as a result, the program that we are now contemplating through the CALFED process to correct those problems—restore the estuary, reduce the conflicts—is on a scale never before attempted. And there is no connect the dots, Cliff notes approach here. There is no easy answer to this, which is one of the reasons why it's a technically challenging, complex task. And we're going to learn as we go along. We are going to make mistakes as we implement this program. And what we have to make sure is that we learn from those mistakes, which is why elevating the issue of having monitoring—adequate monitoring regimes and performance standards is an extremely important issue. The only way we're going to learn from our mistakes is if we have a sense of where we're going. And in adaptive management, which is the sort of learning as you go approach, I think there

are four key elements there. One is you've got to have sense of where you're going, define success in a measurable way with goals and objectives and indicators.

Secondly, have an implementation plan. Design a blueprint that you think, based on what you know now, will get you there.

Third, monitor how you do.

And then fourth, go back and revise your blueprint to get you back on course toward your objectives.

What I want to touch on is how is the CALFED process dealing with that kind of mid-course correction approach, both in the near-term spending that's going on with the money that Congress has provided, as well as in the longer-term planning process.

In the near-term spending process, the Roundtable—the stakeholders and the agencies involved in that process—identified what we considered to be the most urgent priorities for near-term spending, and that was to protect those endangered species that are on the brink of extinction; to reduce the most volatile conflicts in the system; and to start learning from on the ground habitat restoration. And so we identified a list of high priority endangered species. We identified a list of those kinds of habitats that we think we want to start doing demonstration projects on, so we can learn from that on the ground implementation. And then we made sure that for each of the projects that we considered funding, there was a required monitoring process. And those monitoring regimes focus on the obvious things related to the priorities we set. How are endangered species populations fairing as a result of the projects that are being funded? How is on the ground restoration working? For instance, one of the projects that is to be funded this year is gravel replenishment on the Tuolumne and Stanislaus Rivers. The priority there was the need to increase spawning habitat for fall run Chinook salmon, which are in big trouble in the San Joaquin system. There's limited spawning opportunities, so we're going to put more gravel into the system. We're going to look at how it's spread out through the stream. We're going to look at how fish use those new gravel areas. We're going to have biologists splashing around in the streams, checking all this. And then we're going to go back and figure out how to improve the gravel replenishment program so that's more effective next year and the year after and the year after.

We've also dramatically increased the funding available for a more comprehensive monitoring program, which is a cooperative effort of the Federal Government and the Interagency Ecological Program and the non-profit Estuary Institute.

In the longer-term, an independent scientific review panel took a look at the CALFED process and said, "you know, you could really stand to sharpen up some of these goals and objectives and indicators." As a result, most of the major stakeholders who are involved in the CALFED process have been working together over the last 6 to 8 months to try and identify a work plan for revising the ecosystem element, sharpening up these goals and objectives. And, in fact, I think we've made a lot of progress. We've also sponsored a number of technical workshops and conferences with the University of California to identify a comprehensive suite of ecological indicators—in other words, measures of success. I think there has been a lot of progress on that. There's a lot of work to be done, but I think we can say that we're well on the way toward a good set of indicators.

Finally—the final point I want to make addresses the last question that you posed, Mr. Chairman,

and that is about this sort of either or of—do you have a blueprint or you defer decisionmaking. What I want to say is I think that might be a false dichotomy—is that if you have a good blueprint, you make appropriate decisions now and you postpone inappropriate decisions. The example that I would give is that when it comes to restoring habitat, there's pretty much widespread scientific consensus that if you restore large blocks of habitat, that is going to really work better to conserve species than most other things. And so we need to go out and start doing it. We also know that exotic species really, really can damage the ecosystem, but we really don't have a very good idea of what to do about it. And so we're going to have to defer making decisions about how to deal with exotic species until we've done more research and monitoring.

The one last point I want to make on that is that it's also important to defer making site-specific decisions about restoration. It's one thing to have a blueprint that sort of connects our plan from one county to another, from one watershed to another, but that plan is not the place to make decisions about your specific land acquisitions or fish management measures. That is something that is going to come in the more detailed planning process that's going to have to followup on CALFED.

In conclusion, the opportunity that's represented here is an enormous one. It's an exciting one, and I think that we're all committed to trying to carry through the very complex task of rising to the occasion and fleshing out where we want to go. But we cannot defer implementing it until we have it all figured out. The only way we will figure it out is by learning as we go.

Thank you

[The prepared statement of Mr. Bobker may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our next witness is Dr. A. Alan Moghissi, president of the Institute for Regulatory Science, Columbia, Maryland.

Dr. Moghissi.

STATEMENT OF A. ALAN MOGHISSI, PRESIDENT, INSTITUTE FOR REGULATORY SCIENCE, COLUMBIA, MARYLAND

Dr. MOGHISSI. Thank you, Mr. Chairman.

Thank you very much for inviting me to testify before this Committee.

We in the scientific community are not used to be asked to express our voices. Normally, it's the politician or advocacy groups that appear before you. I certainly appreciate to give us a chance to speak on this very important subject.

I'm Alan Moghissi, and I'm president, as you mentioned, of the Institute for Regulatory Science. We are dedicated to the idea that societal decisions must be based on best available scientific information. I was a little confused during this couple of hours about the word environment. I had been with the Environmental Protection Agency for 20 odd years and I have been a professor for some years. I was confused how the word environment is being used. The word environment, as we defined it, consist of people—humans—and other living things supported by the atmosphere, hydrosphere, and geosphere. So when somebody says this is for the environment, I wondered which part of the environment were they talking about.

I've include my biographical summary to this statement, and I would appreciate if the entire

statement would be made a part of the record.

Mr. DOOLITTLE. Yes, it will be.

Dr. MOGHISSI. I am not an ecologist. My perspective is that of a research director who had to seek funds for ecological research; a funder who had to provide money for ecological research; and a scientific journal editor who has to accept or reject papers dealing with ecological activities.

One of my most proudest time has been the sport of ecological risk assessment. The method that was developed as a result of funding that I provided at the time has become the standard method for ecological risk assessment.

The CALFED program, and I'm going to use that word describing the entire project, can be separated into two parts: its goal—the societal objective; and the scientific part that supports that objective. So, there are three questions that need to be answered: How one knows the science is acceptable? What is ecological health and how is it defined? And what—how can ecological health be measured?

The acceptability of scientific information is based on peer review. The information that was provided to me indicates that CALFED did not have a peer review program as its defined within the scientific community. Rather, it had a technical advise. Peer review implies that the person that in groups that are involved in the peer review that are having a stake in the project have no hand in the selection of reviewers and must formally respond to the recommendations of the reviewers.

My statement includes a classification of the scientific information with decreasing level of acceptability, starting from confirmed science—the laws—all the way to pseudo-science. Some people call it junk science.

Now there is a consensus within the scientific community, and I believe CALFED agrees with that too, that there is new metrics for measuring the health of the ecosystem. You cannot go and make some measurements, say this ecosystem is healthy, the other one isn't. Therefore, one has to use ecological indicators, and I guess they are using that too.

I'm surprised that one of the most powerful tools in the ecology, namely ecological risk assessment, does not appear to be a part of this program. This would be one method by which one could identify benefits of action one takes. And this is normally expressed by probabilities. How good is the chance that this species will survive? How good is that the quality of water can be improved?

Instead of answering the question that was raised, and I would be—my statement includes answers to those, let me make several recommendations.

First, CALFED should provide clear and objective measures to demonstrate the status of its success. The success of the program should be measured in terms of quantitative goals achieved as compared to the funds expended. It's very important to relate the goals to amount of money that you all are providing and that in the name of taxpayers.

The entire program should separate science from societal objectives. The scientific aspects of the project should clearly and unambiguously avoid advocacy or the participation of advocacy groups. If scientists from advocacy group participate in that effort, they should do so as scientists and not as representatives of advocacy organization. They must follow the rules of the science, particularly the peer review.

CALFED should try to use science described as—in my classification—should use higher class sciences. And if they use lower class sciences, they should understand the ramifications.

Finally, they should set up a project to independently peer review the program, which I believe would benefit.

Thank you.

[The prepared statement of Dr. Moghissi may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our next witness will be Mr. Dick Dickerson, president of the Regional Council of Rural Counties in Redding, California.

STATEMENT OF DICK DICKERSON, PRESIDENT, REGIONAL COUNCIL OF RURAL COUNTIES, REDDING, CALIFORNIA

Mr. DICKERSON. Yes, thank you, Mr. Chairman. And thank you for the opportunity to testify before the Committee.

I am the president of RCRC. That's an organization of 27 rural California counties. Our membership encompasses a broad geographic area, stretching from the shores of Mono Lake to the shores of Clear Lake, from the valley floor of Yosemite to the top Mount Shasta, and from the farmlands of Sacramento to the San Joaquin Valley and to the Sierra forests.

Our members are located within the San Joaquin, Sacramento, and Trinity watersheds. Collectively, our members are the source areas for the San Francisco Bay Delta. It is from our membership that over 80 percent of the water for the Delta comes.

The forests from within our membership area include the most significant snow pack areas in California. The water storage in these snow packs dwarfs the capacity of all of the reservoirs in the State. Snow melt during the spring and summer months is what keeps the Delta ecosystem alive. The health of the watersheds in our membership areas are, to a great extent, the early indicators of the health of the Deco's ecosystem—or the Delta ecosystem, not by any law of man or a map in a Federal office, but by the laws of Nature. Any successful Bay-Delta solution will depend upon actions in our membership area to implement ecosystem restoration, watershed management, water transfers, new water storage, facilities, and existing storage re-operation.

RCRC is represented in the CALFED process at three levels. Our water committee chairman, Mr. Meacher, from Plumas County, serves on the Bay-Delta Advisory Committee. Our water natural resource consultant, Mr. John Mills, serves on the Ecosystem Restoration Roundtable. Mr. Meachum, Mr. Mills and other RCRC elected officials and staff also participate in numerous BDAC work groups, such as ecosystem restoration, water transfers, assurances, and finance.

The expectation of adequate public participation within CALFED is predicated on the ability of the public to understand the subject matter. To have the opportunity to meaningful their interests and concerns to those making decisions. And for those making the decisions to evaluate and to respond to public input. This is, when effective, an interactive and ongoing process.

Mr. Chairman, the CALFED Bay-Delta Program, if completed, will be the most complex ecosystem restoration program ever carried out within the United States. It will affect the laws of tens of millions of Californians and the millions yet to come. It will cost billions of dollars and involve

the use of significant portions of California land use area to achieve this success. This process should not only involve water managers and Federal State agency personnel, but also the general public, whose lives will be affected by the CALFED solution. The solution will be complex and should not—and should involve, to the greatest extent possible, as much public input as is practical. Notwithstanding the participation of RCRC that I have referenced, we believe that there are very—two very serious problems with the CALFED public participation program.

Mr. Chairman, it is our experience that the CALFED schedule is too short. It fails to allow for most the affected parties to even become acquainted with the information being presented, let alone provided meaningful input. While it is true that the process has been underway for over two years, it is only the past 6 months that clear projected features and components of a solution have been assembled in any understandable manner. It is only in the last two months that a draft environmental impact statement has been released for public review and comment. Unfortunately, during this time period—or this same time period, the California Department of Water Resources released their water plan update with an April 15 deadline for comment. The Bureau of Reclamation set April 17 deadline for comments on its own 5,000-page programmatic environmental impact statement. Most local governments were simply overwhelmed with the paper load. For the general public faced with earning a living, the invitation to participate in this process on that schedule was quite impossible.

In addition, providing meaningful comments was further frustrated by the significant portions of CALFED solution packages being incomplete at this time. For while we know now what various alternatives are for the conveyance, there are missing pieces to the puzzle. For example, there is no assurance package. For our members, the issues of protections and guarantees of performance is of paramount importance. There is no water transfers package. Water transfers, while an important component of any CALFED solution, pose the most direct threat to our economies if not properly designed and implemented. There is no complete watershed strategy. At best, CALFED has put together a strategy on how to do a watershed strategy. The watershed restoration and management component of CALFED's solution is critically important to our members. There is no clear direction on any new surface storage. Without new storage of surface water, the chance of producing a CALFED solution that could be—not be—not negatively affect our members—is very slim. Therefore, we feel that we are being forced to comment on a an incomplete CALFED package in an unrealistic timeframe. We are not optimistic that our comments would have any influence on the process, given the lack of time for CALFED staff to evaluate and incorporate changes. We must underscore that we do not feel meaningful public input can be accommodated in the CALFED process given it is to be completed in the next 7 months. That is a schedule that sets up confrontation, not consensus.

I'll skip through some of the testimony to get to some specifics in getting the participation of the public.

The CALFED ecosystem restoration plan, for example, was a multi-volume plan to restore the environment of the Delta and it was mailed out to only 550 recipients. And that's according to CALFED's own mailing list. CALFED's choice of who the documents went to was also of concern. In one of our State senate districts in the Sacramento Valley, only two farm bureaus one of those 250-550 copies. No copies were received by the Women in Agriculture, or by any Chamber of

Commerce. However, more than 25 copies went out to environment groups, such as the Sierra Club, the Nature Conservancy, and Restoring the Earth. Also on the A list of recipients were universities, which received 20 copies, in places as far away as Riverside. Federal and State agencies obtained over 40 copies. Those who stood to be most affected by the plan, those whose lands might have been retired or whose water rights might be acquired, or those whose land might be converted to habitat were left in the dark.

Public frustration expressed to us, the local elected officials, was significant. They have asked us, and were are asking you, to help expand and improve the public participation process in a meaningful way.

The CALFED program has seemingly expected rural California to supply the land, the water, job sacrifices to fix the Delta, without question in the manner of traditional top-down agency mandates. We believe that this much change. CALFED has scheduled its own document releases and review periods in apparent ignorance or oblivion to the actions being taken by other CALFED agencies. We believe that this must change.

CALFED expects all California to step forward to help fix the DELTA when it is convenient for CALFED, in a location convenient for CALFED, in a manner convenient for CALFED, and we believe that this much change.

Mr. Chairman, one of CALFED's own brochures read, "ultimately, it is the active participation of the entire public that will help fix the Bay Delta." And we believe that that should not change.

Thank you.

[The prepared statement of Mr. Dickerson may be found at end of hearing.]

Mr. DOOLITTLE. Thank you.

Our final witness is Mr. Bill Gaines, director of governmental affairs for the California Waterfowl Association in Sacramento, California.

Mr. Gaines.

STATEMENT OF BILL GAINES, CALIFORNIA WATERFOWL ASSOCIATION

Mr. GAINES. Good afternoon, Mr. Chairman and members of the Subcommittee. My name is Bill Gaines, and I am the Director of Government Affairs for the California Waterfowl Association.

Thank you for the opportunity to come before you today to discuss the private sector's role in the CALFED Bay-Delta program.

California has lost over 90 percent of its historical waterfowl habitat. Due to significant changes in our natural hydrology and the lack of true seasonal flows, the ability to provide high-quality wetland habitat today largely must be done through managed wetlands. In other words, wetlands which are artificially irrigated and intensely managed to create positive wetlands values and functions.

The CALFED Bay-Delta program is a long-term effort to address ecosystem health, water quality, water supply reliability and levee system integrity in the Bay-Delta watershed. Because the restoration, enhancement, and maintenance of waterfowl habitat throughout much of this watershed also depends upon these areas of concern, properly implemented, the CALFED Bay-Delta Program represents a tremendous opportunity to address the needs of wintering and nesting waterfowl and other wetland dependent species.

Today, I've been asked to provide our association's view regarding public participation in the CALFED Bay-Delta Program. As a 501(c)3 non-profit organization, representing nearly 13,000 Bay-Delta stakeholders, the California Waterfowl Association also has a significant interest in the private sector's ability to contribute to the CALFED process.

Let me begin to address this question with a statement that, although California's "water wars" and deteriorating ecosystem health are well chronicled, the CALFED Bay-Delta Program is far and away the most significant and positive multi-interest effort ever undertaken to address water and environmental concerns in California—or perhaps throughout the Nation.

The sheer magnitude of this landscape effort results in unintended barriers and natural disincentives to public participation. At times, even those individuals or the representatives of agencies and organizations who are fortunate enough to be able to dedicate full-time to this sweeping effort, struggle to obtain a comprehensive grip on the program and its dynamic process. Clearly, providing for a program which offers ample public participation and opportunities, as well as real-time public awareness of its continual progress and potential impacts is, in itself, a tremendous challenge for the Bay-Delta program team. Irregardless of the stumbling blocks associated with assuring full stakeholder participation in such a mammoth program, the California Waterfowl Association believes the CALFED team has made every effort to design a process which facilitates and encourages important public input, as well as return real time information flow.

Yes, our association, even as a member of the program's Ecosystem Restoration Roundtable and BDAC, has experienced times of serious frustration due to our inability to positively influence CALFED program decisions. But we don't contribute this frustration to a CALFED agency team set on implementing the program "their way," but rather, to the tremendous difficulty associated with trying to address a myriad of Bay-Delta concerns in a fashion which is palatable to each of the many stakeholder interests which must be served.

The ability of the private sector to be heard in this process ranges from high profile role of formal committees established to provide direct advisory input to CALFED agencies, to hands-on workshops in small rural towns throughout the watershed, to other public outreach efforts which are enough to choke even the hardiest of mailboxes.

As each of you is probably aware, CALFED agencies have tried to facilitate formal public input and interaction by establishing the Bay-Delta Advisory Council, or BDAC, a committee which is chartered under the Federal Advisory Committee Act and comprised of a variety of stakeholder interests, including California Waterfowl Association.

In addition to BDAC, formal stakeholder interaction is also provided by the CALFED Ecosystem Roundtable, which is a roughly 20 member BDAC subcommittee. In addition to the BDAC, and BDAC subcommittee, there's also 13 technical panels. And, in addition, an umbrella integration panel, which provides an opportunity for specialists, if you will, in various areas of stressed species, stressed habitats or regions, to help design program priorities, as well as rank, if you will, and evaluate the program projects which are offered for funding.

One of the main concerns that the California Waterfowl Association has, however, is that, regardless of our ability to dedicate a fair amount of time to the program and our seat on the Bay-Delta Advisory Council as well as on the Ecosystem Roundtable, we have been relatively

limited in our ability to fully address each of our concerns.

Our association fully appreciates and supports the goal of the CALFED program to address water supply reliability and the importance of addressing the habitat needs of listed fish species in achieving this objective. Our "managed wetlands" will also benefit greatly from achieving this goal. Yet, if the program is to make a sincere effort to restore the integrity of the Bay-Delta ecosystem, it must also more fully consider the serious habitat needs of native wildlife. Most notably, wintering and nesting waterfowl, and other species which share their habitats.

California's Central Valley, largely the same geographical area which is being addressed by the CALFED Ecosystem Restoration Program, is widely recognized as one of the most important waterfowl regions in North America. It provides wintering and nesting habitat for nearly a full 1/4 of our continental waterfowl population. Yet, this area has suffered the significant loss of nearly 95 percent of its historical waterfowl habitat.

In the mid 1980's, in response to serious reductions in North America waterfowl populations, the North American Waterfowl Management Plan was signed by the Federal Governments of Canada, the United States, and Mexico. This plan established broad waterfowl population goals and identified seven priorities areas on the North American continent in need of habitat restoration and enhancement. California's Central Valley was one of those initial seven priority areas.

Two years later, in 1988, a habitat restoration program, in many ways like CALFED, was initiated to address North American Waterfowl Management Plan objectives in our Central Valley. This public-private conservation effort, known as the Central Valley Habitat Joint Venture, carefully established biologically based acreage objectives for the preservation, enhancement, restoration, and maintenance of waterfowl habitat throughout much of the CALFED project area. And, in your packet, I have provided you with a matrix of exactly what those habitat goals are.

Recognizing the importance of private landowner support to the success of the joint venture to be able to obtain those goals, a serious effort was made to minimize the changes to existing land use necessary to meet waterfowl needs. As such, the quantity of acreage targeted for wetland restoration was somewhat limited, and heavy emphasis was placed upon leaving land in agricultural production and simply working with the landowner to increase it's wildlife values.

The tremendous loss of Central Valley wetland habitat, as well as the critical importance of the region to migratory waterfowl, is well documented. Clearly, the CALFED program ecosystem restoration effort could, and should, play a significant role in this critical conservation effort. Yet, thus far, the best efforts of our association to elevate waterfowl and their habitats to a high priority of the CALFED program have been relatively unsuccessful.

Congress has already recognized the importance of the migratory waterfowl resource through it's support of the North American Waterfowl Management Plan, and it's authorization and annual funding of the North American Wetlands Conservation Act—the North American Waterfowl Management's Plan Federal funding source.

Today, I ask for your assistance in creating a CALFED program which not only helps to meet these waterfowl needs, but also facilitates greater landowner support by providing full Federal funding to the CALFED Ecosystem Restoration effort, and earmarking a reasonable portion of these dollars for projects which are entirely consistent with the accepted habitat objectives of the Central

Valley Habitat Joint Venture.

In conclusion, the California Waterfowl Association would like to state that it is highly committed to the CALFED program and it's process, and would like to applaud the CALFED team for what we believe is a more than reasonable effort to design a program which maximizes the role of the private sector in the decisionmaking process. We ask those who may disagree to consider the tremendous difficulty associated with obtaining complete public satisfaction with a program of this size and scope. We also ask Congress to help us fully realize the potential of the CALFED program to appropriately address the needs of our North American waterfowl population and other native plant and animal species who share their habitats.

On behalf of the members of the California Waterfowl Association and waterfowl enthusiasts throughout the North American continent, I thank you for the opportunity to come before you today. Thank you.

[The prepared statement of Mr. Gaines may be found at end of hearing.]

[Discussion follows.]

Mr. DOOLITTLE. Thank you. There's so much material here, it's hard to know where to begin. Mr. Snow, do you file your documents electronically?

Mr. SNOW. We have a web page, where I think we have most of our documents. I'm not familiar exactly which ones are on that web page, but a lot of our material can be downloaded from the web page.

Mr. DOOLITTLE. So would this—we happen to have this up here, and I was listening to Mr. Dickerson's testimony about coping with—reacting to all these multi-thousand page documents. And this is the—I guess—the one that's out right now for comment by CALFED. Would this be on a web site, do you think?

Mr. SNOW. That's what I don't know. There may be somebody here who knows for sure. I know we have the phase 2 report, which is a summary of everything that happened and is contained in that—that is definitely on our web site. It can be downloaded. I know we intended to get this on a web site. I can't verify without checking.

Mr. DOOLITTLE. OK. I just—we did that 2 or 3 years ago in the Congress. I think every document that is generated is generated electronically and it just seems like it would be so much easier, because as Mr. Dickerson observed, I'm sure you didn't want to print too many copies of these because of the volume of it. And yet, for the public to be able to participate, the Internet would offer a remarkable opportunity for people to gain access to it. And I guess—I think—you could have all your maps and everything included within that. Just a thought.

Mr. Dickerson indicated that there's no clear direction on new surface storage, which is a criticism I share. And he indicates that without new storage of surface water, the chances of producing a CALFED solution that would not negatively affect our members is very slim. Could you comment on the surface storage component of CALFED.

Mr. SNOW. Certainly. As you know, we have developed three alternatives and we have evaluated each of the three alternatives with no additional storage and an additional 6 million acre feet of storage. And, so we've evaluated each approach.

It's no surprise that, in order to get additional yield water supply in the system, you must have additional storage. Modification and conveyance, making the ecosystem more resilient, while adding some certainty to operations, do not in fact generate additional water supply. So the only way you get additional water supply or additional yield in the system is by adding storage.

And we have evaluated storage both north of the Delta, as well as south of the Delta. We believe from our analysis that an additional 6 million acre feet is just about the end of the spectrum in terms of reasonable investment, because of the yield curves, which are actually contained in the briefing document if you want to followup on this.

Mr. DOOLITTLE. So, you've done analyses of yields of different proposed projects?

Mr. SNOW. We've done it in a broad evaluation of adding storage within the system and how much water you can move into storage.

Mr. DOOLITTLE. How did the proposed Auburn Dam fare on your yield curve? Is it one that you considered?

Mr. SNOW. We evaluated Auburn Dam. I do not recall, off-hand, how it did on the yield curve. New additional on-stream reservoirs do not fare well at all in our analysis. And, you will see in our planning document much more emphasis on off-stream, groundwater banking, and consideration of expanding existing on-stream.

Mr. DOOLITTLE. Why don't they fare well?

Mr. SNOW. Well, it's because of the—we have identified four co-equal objectives in terms of the CALFED purpose. We have actually a fairly unusual purpose and needs statement. We've developed where we hold water supply reliability, water quality, levy stability, and ecosystem, as coequal objectives. And when we look at the sites that you have available for new on-stream, it does not pencil out as well as the opportunities that you create with on-stream—or, excuse me—with off-stream reservoir, groundwater storage, and raising existing reservoirs.

Mr. DOOLITTLE. So it's sort of by definition then, you adopt that on-stream storage is less desirable than other alternatives, because of the impact you feel it has on the ecosystem?

Mr. SNOW. It's not just ecosystem. It's also the issue of how you tie it into the system. What are the benefits you can get out of it, in terms of supplementing flows for fisheries purposes. I think it's important to draw a distinction here. From a technical standpoint, all potential reservoir sites, on-stream or off-stream, are still on the table, because we have not finished 404 analysis to exclude them.

However, I think it's important for me to stress that from our planning purposes, the examples that we included in here are a much more realistic expectation of what may be buildable out there in the system that meets the four objectives of the program.

Mr. DOOLITTLE. Well, I just can't imagine that a facility such as Auburn wouldn't pass your test. You heard Dr. Quinn say they'd be interested in water at \$200 an acre foot and this would produce water at a \$100 an acre foot. Not that we're willing to sell any of it to Southern California, but in case we were, it would be there.

Mr. SNOW. Yes, certainly cost would not be a lone consideration for us in evaluating whether it fits into the CALFED mix or not. I think the difference from the way Auburn has been discussed more historically, in terms of some specific water supply benefits and certainly flood control benefits,

is different than the way CALFED is looking at storage modifications to fit into the broader program. And it's in that context that that reservoir, in particular, and new on-stream reservoirs, in general, do not hold up well in our analysis.

Mr. DOOLITTLE. You may not be able to do it today, but could you refer me to that part of your analysis where that's described.

Mr. SNOW. Sure, I'll try to develop or send you information.

Mr. DOOLITTLE. OK, and then probably, based on that, I'll have some further questions. They have now called a series of votes, it looks like. In the mean time, let's go to Mr. Miller.

Mr. MILLER. Thank you. I'll just have one question, and it may that this question has to be resolved in writing. But, Gary, I just wanted—is there a big inconsistency between your statement of sort of how your proceeding in CALFED and Professor Moghissi—between your two testimonies here?

Mr. BOBKER. No, actually, I think they're quite consistent. Some of the things that Dr. Moghissi referred to, the need for independent scientific review or the need for quantitative objectives—and these are things that not only the environmental community, but agricultural and urban stakeholders—involved in the process have been calling for. It took a little while to get, I think, an adequate response from the CALFED program, but the good news has been that they have moved in the direction of bringing in scientific review and the initial stages of developing quantitative objectives.

Mr. MILLER. Let me ask you this. But the screen that you sort of describe about how you—when you look—at some of these ecosystem restoration programs—do we apply the same screen to facilities? Can we talk about—you talked about environmental risk assessment—it's kind of peer review?

Mr. BOBKER. Well, yes, I think it's fair to say that the level of quantitative analysis, of definition of success, and of independent scientific review, to which we've been holding the environmental restoration program accountable, has not been applied as rigorously to the other parts of the program.

The Environmental Water Caucus has, in some of our communications with Mr. Snow and the program, identified that as a need. We really haven't—we're waiting to hear a little bit more about how it's going to be dealt with. But, there's clearly a need, I think, for independent scientific review of the water quality component, independent scientific review of some of the water efficiency elements. I could go on and on. I will provide the Committee with a longer list that we have supplied to them of some of those needs.

Mr. MILLER. Thank you. Our apologies that we're now coming up against these votes. But, Mr. Gaines, I want to thank you. You're description of being involved in this process probably should be mandated reading for all of us. But we hope that, as we move into this next phase, that we narrow some—so people aren't wearing so many hats and we can start to harden some of these consideration. But, it's great reading. Thank you.

[Laughter.]

I'm not sure it's a great experience.

[Laughter.]

Mr. DOOLITTLE. I think at this point we're going to have to recess and come back after the vote. There are four votes. It will be half an hour before we make it back. I wish I had better news.

Do any of you have to leave to make a plane?

Mr. BOBKER. Too late now.

[Laughter.]

Mr. DOOLITTLE. All right. We'll get back as soon as we can.

[Recess.]

Mr. DOOLITTLE. OK, thank you for your indulgence. I see it took even longer than I was expecting. Mr. Pombo is recognized for his questions.

Mr. POMBO. Thank you, Mr. Chairman. I guess I'll start with Mr. Snow. Two different areas that I'd like to go in with you. We've discussed a lot of different things and you've heard all of the testimony so far.

The first area I'd like to question you on is in terms of process. The concern has been raised about public participation in the process. The concern that I'm hearing from constituents and from others is that you have done an admirable job of pulling together what you consider the stakeholders and pulling those people in and trying to make them part of the process.

I think that—and I understand you didn't attend the hearing in Walnut Grove—but, I think what that hearing represented was the general frustration, the lack of information that was available, the lack of information that has been distributed to those that are being impacted. I think it's fairly obvious that none of those people that attended that hearing, who live and work in the Delta, who's land and water will be directly impacted by whatever final decisions are made, are considered stakeholders in this process. At least, they feel that they have been excluded from this process.

I think that's an old pattern that we have fallen into with CALFED, and, as I've told you before, I don't oppose the CALFED process. I think it's very important. But I think that one of the things that we've fallen into with this process is, that you look at the people who are on the panel that are considered stakeholders, and you don't have a lot of people who own property in the Delta or have water rights to the water that flows through the Delta that are included in the process.

Would you like to respond to that?

Mr. SNOW. Sure. I think there's two points that everybody would agree with. And that is—and they seem contradictory, but I don't believe that they are—that the CALFED process has done more in terms of outreach than any other process has attempted. The number of meetings, the number of workshops, our outreach, has gone beyond that which has done for most projects like this.

But at the same token though, I think there's agreement that we need to do more. Because of the magnitude of the potential impacts, we need to continue and even expand beyond the traditional stakeholders. And I think the Delta, in fact, is a good example of that, where we have, let's say, relied on the easier representatives—the traditional folks, an Alex Hildebrand or Pat McCarty, Jim and Sally Shanks, and Tom Zuckerman, and Dante Nomalini—those people that have provided us advice. We tried to reach out through the Delta Protection Commission and attend some of those

meetings, and some of the rec board meetings.

But, I think the point that you're making—as we move forward in this and start making clear decisions, we need to get down to the community level. To the level where people are actually impacted by land acquisition strategies. And I agree with that. And I think we're trying to, at this stage of a draft programmatic, to get clearer on where we're headed and what the issues are. We have to do more outreach, particularly in the communities that are to be impacted by these actions and the Delta is the best example of that.

We've tried to listen to the different issues. I think they've been very articulate at a lot of meetings, including the Walnut Grove public hearing. There's a whole host of issues that they're concerned about. Land retirement is only one of them. They're concerned about isolated facilities. They're concerned about commitment to maintaining levies. They're concerned about getting ESA restrictions off their back, so they can maintain the levies. We're listening to those points and I think we need to do a better job of communicating that.

Mr. POMBO. In terms of the Walnut Grove hearing, one of the most often shortcomings that I heard was that each person was allowed to make a statement for 3 minutes. Many of them were cutoff mid-sentence, when their 3 minutes were up. No questions were answered. Many people came there with questions and walked away with the same questions.

I get the feeling that you're going through this process so that, at the end, we can say we had 17 hearings throughout California with the general public. And if all of the hearings are the same as this particular one was, you may end up with 17 hearings with the general public, but you will end up with everyone who went to those 17 hearings walking away without one question being answered that they walked in with. And I think that something needs to change in the way you are conducting these hearings, so that people at least feel like they got some answers.

Mr. SNOW. There's two different—there's many different kinds of meetings, but there's basically two types that we're pursuing in CALFED. The one is the legal hearing process, which has very specific legal requirements on how we conduct ourselves. And the other is the open meeting with full exchange and dialog between the parties.

We have even modified our hearings, so that we start a public meeting an hour before the formal hearing, that allows people who wish to come to actually meet with individuals in the program and discuss different issues and get answers to those questions. We also have been conducting—you know, in the past 2 years, over 350 community meetings and outreach efforts, whether it's a formal CALFED public meeting or a meeting cosponsored with a local reclamation district, where we have the full exchange.

But we are conducting very formal public hearings to comply with law and case law to make sure that everybody has equal access and equal opportunity to provide comments into the official record.

What I would propose in this case, is that if we need to hold a public meeting for the purpose of the dialogue, not the official hearing record, we'd be glad to do that. And we've done that.

Mr. POMBO. I know, in my area, there's definitely a need for that. I don't know if in Riverside or some of the other areas where hearing's are proposed there is a need for that kind of hearing. But I do know that the people that I represent probably will be more impacted by whatever decision than anybody in the State in California, and they feel like they've been cut out of the process.

Mr. Chairman, my time's expired. I have a number of other questions I would like to ask. But, I don't know exactly how you're going to handle the time.

Mr. DOOLITTLE. Well--

Mr. POMBO. Mr. Miller said he would give me his time.

[Laughter.]

Mr. DOOLITTLE. Go ahead. Proceed.

Mr. POMBO. Second, in terms of process, and this takes off of something that Dr. Moghissi was talking about. I have a real concern about how we end up with a final product. I feel that there is definitely a lack of peer reviewed science that is being done at this point.

And you may debate me on that, but from my perspective, there's a lack of honest science being done at this point in the process. I don't feel like you have gone to outside people who don't have a stake in this end product and said, is what we are doing accurate, scientifically. Does it hold up? I don't think that that's happening, one.

Two, I have a list of proposed projects that I believe came from your office. These are not the projects that we are approving as part of the appropriations process. We're being asked for \$143 million, and no congressional committee is having oversight hearings into approving these projects. To my knowledge, no committee and the State assembly or State senate is holding hearings into whether or not we should spend taxpayer money on these projects.

What we are being asked to do is to approve a bulk amount of money to go to CALFED. Who is ultimately responsible if you waste money? Who is ultimately responsible if you put together something that is full of fraud and abuse, that benefits the people that are sitting on the board, who are participating in the process? Where is the taxpayer accountability for the end result? Who—and don't take this personally—but, who voted for you? Who put you in to make you king to decide where we spend taxpayer dollars?

Mr. SNOW. Let me start by saying that being king is grossly overrated, if that's what I am in this process.

[Laughter.]

Mr. POMBO. And I don't want your job. I'm just asking.

Mr. SNOW. Do you have any positions open?

[Laughter.]

That's an excellent question and let me start by saying we think we have put a process in place that guards against those types of abuses. We subject people on panels to conflict requirements, disclosure statements. We work our way through that, and certainly Gary Bobker and Rich can attest to what we require of even the advisory panel in terms of disclosure of interest and remote interest associated with any projects that may be coming forward.

The answer your question—actually, in terms of where the responsibility lies—actually is in the same place as how did I get this job. And basically that is, I'm accountable to the secretary of Interior and to Governor Wilson through the secretary for resources for the State of California. And in terms of the two funding sources—two primary funding sources we are utilizing now in funding these projects—Proposition 204 specifically puts the secretary for resources for the State of California as the fiduciary agent for those moneys. He must be responsible that they are expended in

compliance with State law and all the provisions of conflict of interest, contract law, et cetera.

On the Federal side, it is, of course, the secretary of Interior responsible for making sure that those moneys are expended in an efficient and effective fashion under Federal law. Now we have a very elaborate process set up to move projects forward through many levels of screening and review and peer review, before those lists move forward for their recommendations. But in terms of——

Mr. POMBO. You say peer review, but you don't mean outside peer review.

Mr. SNOW. Well, I do mean-

Mr. POMBO. It's within the group.

Mr. SNOW. [continuing] outside peer review in the sense it's not just agency folks reviewing it. When we have technical teams, for example, where they're evaluating the merits of screening projects to achieve the objectives on screening and fish passage problems, that includes technical experts from the agency, as well as stakeholder community. And so that is a broader based science review and it's not simply an agency deciding this is what we would like to do next year.

Mr. POMBO. Dr. Moghissi, would you like to respond to that?

Dr. MOGHISSI. I don't believe that qualifies for peer review. That is technical advise they are receiving. Peer review would imply that Mr. Snow or anybody else who is involved in it would have no hand in selection of the reviewers and he would have to respond formally to the recommendation of those.

No—this problem has been around, particularly with the Federal Government, for a number of years and there is numerous reports from the General Accounting Office, from the National Research Council, which as you know, is the research arm of the National Academy of Sciences and National Academy of Engineering, and so on—there is a fairly broad—from American Association of Engineering Society, American Medical Association—there's a broad consensus of what constitutes peer review.

That is a very worthy thing he's doing in which he basically determines the relevancy of the project, but this is not peer review.

Mr. POMBO. Mr. Gaines, you and I have talked on innumerable occasions about waterfowl habitat protection throughout the Central Valley of California. One of the issues that you have brought up to me, in the past, was the value of farm land in providing waterfowl habitat. Would you like to share with the Committee the impact of the retirement of vast number of acreages in this particular area?

Mr. GAINES. Sure. Let me reiterate a little bit of what was in my testimony earlier. The Central Valley Habitat Joint Venture, which, of course, is the public-private effort under the North American Waterfowl Management Plan, is implementing waterfowl conservation efforts in California—the Joint Venture is one of many, but that's one of the main bodies that's moving forward.

When we pulled together our waterfowl population goals for California and the Pacific flyway, we started out with bird numbers, and we worked that down into what their energetic requirements would be, and then ultimately, what type of habitat changes we had to make on the ground. We knew that the best we could probably do would be to get possibly 300,000 to 400,000 acres of true managed wetlands, or good wetlands, in the Central Valley. And somehow, some way, we were going to have to do something else, because even if that block of

habitat—400,000-450,000—acres was managed to be the absolute best it could possibly be for waterfowl, it wasn't going to be enough.

And so, what we did is we also established a goal that we call our agricultural enhancement goal, which is actually 443,000 acres of ag land, Central Valley wide, that we want to see farmed, but farmed in a wildlife friendly manner.

In the Delta, which is one of the areas where, of course, because of flood control projects and other changes in our natural hydrology, we've lost a whole bunch of naturally occurring wetland habitat, the corn fields, wheat fields, and other agricultural production that takes place in the Delta now, provides a real critical component, if you will, of that 443,000 acre agricultural enhancement objective. Specifically in the Delta basin itself, the Central Valley Habitat Joint Venture has established a goal of annually enhancing about 68,000 acres of farm land. And without that block of 68,000 acres, whether it be winter corn or what have you, we'd be really in deep, deep trouble.

One of the things that you hear about when you talk to folks about the CALFED Bay-Delta program is all these wonderful wetlands that are going to come about as a result of the program. Well, there's wetlands and there's wetlands. Tidal wetlands, for example, are what we would consider very marginal waterfowl habitat—great for fish, great for a lot of other species, not real good for ducks—but it depends upon the species of ducks, some species like them. But, by and large, the ones that are the most popular game bird, so to speak, in California, the mallard, pintail, teal, and so forth, tidal wetlands don't give them much, if anything.

Seasonal flood plain, because we don't have the seasonal flows that we used to have anymore, we basically have seasonal flows only when we have no more carrying capacity in the dams and we've got to let some water go—provides very minimal waterfowl habitat as well.

So, if we're going to get there—and we're going to get there in the Central Valley, and specifically in the Delta, because that really is ground zero for our waterfowl effort—we really need to maintain a serious block of agricultural land and we need to do the best we can to keep it as duck friendly and wildlife friendly as we can.

Mr. POMBO. Mr. Snow, on the land that would be necessary to be retired under your plan, the amount—whatever that amount ends up being—do you intend on paying for it, or do you intend on just putting it on a map and leaving the restrictions on the use of that property?

Mr. SNOW. It's our intent that any land that's necessary is acquired in the marketplace.

Mr. POMBO. Using your figures, it's somewhere between \$1.5 and \$2 billion for the purchase of the land that you said was necessary. Do you—have you included that in the budget in the financing of this?

Mr. SNOW. I'm not sure how you're arriving at that number, but we would have those numbers accounted for in some fashion in our total cost estimates.

Mr. POMBO. Do you think that the elected representatives that have a responsibility to the taxpayers should know that they are committing to a \$1.5 to \$2 billion land acquisition cost as part of this program?

Mr. SNOW. But I don't think that's the way to characterize this. When we show the cost-

Mr. POMBO. You said you were going to pay for it.

Mr. SNOW. That's correct. But I guess the point I'm making—if you look at the numbers, you'll

notice that we show as much as 35,000 acres of ag land conversion, primarily in the Delta region, as a product of stabilizing the levies. And we show those kinds of costs as part of the levy process.

Mr. POMBO. But you would have to pay for that land.

Mr. SNOW. But it's part of the levy project. I guess that's my point. Some of the strategies of stabilizing levies is that you buildup on the interior side of the levy, and also to try to arrest subsidence. That strip of land around the levies that you're now having to manage in a different way to stabilize the levy has taken up some of the ag land, and——

Mr. POMBO. You still have to pay for it.

Mr. SNOW. That's correct.

Mr. POMBO. My point is—whether you take it for seasonal wetlands, or tidal wetlands, or you just leave it fallow, or whatever you decide to do with it—you still have to pay for it.

Mr. SNOW. Correct.

Mr. POMBO. And, if it takes the 250,000 to 400,000 acres—and I believe your figure was 380,000, that you testified to here today—it's between \$1.5 and \$2 billion in current market value. And that's considering that it's all farm land; and that there's no speculative value on that land as well; and that you're not taking out permanent crops; that you're not taking out home sites; that's just on straight farm land.

That is a considerable amount of money that I don't believe is going to be in the budget in the very near future. And, once you adopt this plan, and you've set aside that land, at least on the map, you've impacted the value of somewhere between 250,000 and 400,000 acres, depending upon what the final plan is.

And I don't—I've got to tell you that I don't believe there's anyone in Congress that's going to stand up and tell you, honestly, that you're going to get that money. I have a real problem with doing that. I have a real problem with us going into this knowing that we're going to devalue several hundred thousand acres of land, and knowing that we can't pay for it, at least not in the near term.

The final issue that I would like to go over with you deals with the water storage component of this. I do not believe that the documents—the draft documents—that we have sitting in front of us right now, adequately address the need for surface water in the future. I don't believe that it addresses the need for surface water for California. I don't believe it addresses the need for surface water to take care of water quality issues in the Delta.

I believe that, with what you've included in here, you are guaranteeing that we will have that train wreck. And that train wreck will be these guys that are demanding water quality as part of this, and those that are demanding reliability on their water sources. And you're going to have to take water away from someone, because you're not going to provide the amount of water that's necessary to provide the water quality goals and the reliability goals that you've outlined for yourself—with the surface water provisions that you have included in this.

I believe they are wholly inadequate to take care of your stated goals. It may avoid a fight on your committee—it may avoid a fight within the so-called stakeholders that are participating in the process right now, but when reality hits, and you've told these people that we're guaranteeing certain water quality and you've told these people we're guaranteeing certain reliability, in exchange for getting them to sign off on the whole program, the reality is, you don't have enough water to do it.

And you're going to be back looking at trying to develop surface water in order to meet those goals. And going into this process, I think you have completely short shirted that part of the document. There may be a reason for doing it, but I think that, in the long run, you're going to be sorry that we did—or that we all will be sorry that we did.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Well, thank you. I must say, I join in Mr. Pombo's sentiments. And I got to tell you, I'm not happy about a process that this favors surface water, and especially on-stream surface water, especially like we've got—there's a possibility at Auburn. And I would be very interested in your material that you are going to send me on that point.

You talked about levy stabilization, Mr. Snow. Is there any possibility that somehow the city and county of Sacramento or their flood control agency is going to qualify for CALFED moneys or prop 204 moneys to do it's levy enlarging project?

Mr. SNOW. The way we have defined the problem area and the way we have approached the levy program, or the component of CALFED, the levy program is focused on the legal Delta, continued out to Carcinas Straight. And that would not include the American River Levy.

Mr. DOOLITTLE. OK. Thank you. Ecological risk assessment was mentioned by Dr. Moghissi. Is that—and he indicated in his testimony that wasn't part of your analysis—do you concur in that?

Mr. SNOW. We have developed—well, maybe I should caveat this—maybe I'm not familiar with the precise definition of peer review as presented by the doctor here. However, we have initiated a process to bring in outsiders not associated with CALFED or it's members. We started it first with a science panel review of our program and one of their recommendations was to set up ongoing science review, which we have started working on with the stakeholders—to set up a long term process to ensure a science review.

So, maybe I should use that term—that we have brought in independent science review, whether that fits the precise definition of peer review, as presented by Dr. Moghissi—I'm not familiar with that definition.

Mr. DOOLITTLE. But, I think the—and I was interested in the peer review too, but the ecological risk assessment, as I understood it, would enable you to, I guess, quantify what it's going to cost to achieve certain objectives and measure the biggest bang for the buck. Am I mis-characterizing it, Dr. Moghissi?

Dr. MOGHISSI. Right.

Mr. DOOLITTLE. OK.

Mr. SNOW. So, I answered the wrong question, is that—

Mr. DOOLITTLE. Well, that's OK, because I was going to ask you that—that was my next one. So——

Mr. SNOW. That was the next one.

Mr. DOOLITTLE. That's all right.

Mr. SNOW. We have not done that type of analysis at this point in our programmatic evaluation. That type of risk assessment comes up in specific applications. The place where we are doing it now, is trying to get a risk assessment on the fish entrainment issue, which is a major issue in the

Delta. The effect of the two large diversions in south Delta, and when you modify the pumping pattern and you modify the location of pumps, whether you add screens, we are attempting to get a handle on the percent benefit or probability of improving specifically, the endangered species in the Delta. And given different configurations and different patterns, what are the probability you can recover the species, which is the objective.

So we're now introducing it on a specific issue like that. And I think the concept of being able to address the probabilities that actions will achieve the designed result, is something that comes along with our program as we get focused on a preferred alternative at a programmatic level and start moving to specific actions.

Mr. DOOLITTLE. I guess what I don't understand—I really don't mean to harp on this—but, it seems—I don't know how you could rank like you said, using your criteria, on-stream storage would not fare well. But I don't know—that seems odd to me—that ecological risk assessment wouldn't be part of that first tier. Because otherwise, things are going to fall off that may never get subjected to ecological risk assessment. And yet, that to me, is so fundamental, in terms of allocating scarce resources.

Mr. SNOW. Well, I can't answer that precise question in terms of risk assessment and how it applies to that. I mean, I think the issue that we've looked at with respect to storage is trying to overlap as many issues as we can.

And so, for example, looking at the difference between on-stream storage on the American River and a popular off-stream site that's often discussed, Seitz Reservoir in the Sacramento Valley. When you look at a Seitz Reservoir, you can do a lot of things with that, including make a joint investment to clean up the red bluff diversion structure, which is a problem with fisheries and a problem for ag users in the Sac Valley. And in doing that, you fix current problems with the Tahama Calusa Canal Diversion.

At the same time, you prepare a diversion structure for an off-stream reservoir. Also, it gives you flexibility to provide water to the backside of some of the irrigation districts, thereby reducing their take off the river and further reducing fish entrainment problems.

So, we'd look at those types of linkages and start building and compounding the joint benefits that we can get. And that's why I make the comment, in a general sense, that off-stream reservoirs, particularly, moved away from the system and the other problems—on-stream reservoirs don't provide the benefits that we've seen with some of these classic off-stream reservoirs.

Mr. DOOLITTLE. I guess the thing that I find strange is that you're one governmental entity—you're made up of a consortium of governmental entities—and yet, members of that consortium, like the Corps of Engineers, in the State of California, Department of Water Resources, have clearly stated in testimony, the only solution for the grave flood threat to the city and county of Sacramento that protects them, is an Auburn Dam. I mean, the Corps of Engineers has spent millions of dollars recently, coming up with that conclusion, and they're a member of your CALFED—are they not?

Mr. SNOW. Yes, they are.

Mr. DOOLITTLE. And the State of California Department of Water Resources is another entity involved with that. They've both come to that conclusion, and yet, CALFED, which is getting

hundreds of millions of dollars in funding—State and Federal—has developed criteria that puts blinders on itself. I mean, this just seems very, very strange to me—that something where we already have the need for flood control—I mean, why shouldn't that be, because of that other reality, shouldn't that be reflected in your consideration with reference to a project like Auburn?

Mr. SNOW. Well, I think it is a consideration and I can only surmise that if the CALFED objective was flood control, and was our No. 1 objective, and then we had incidental benefits from it, we might look at Auburn differently. I might also expect that if the Corps had the four coequal objectives that CALFED does, that they might look at Auburn differently. I do not know.

Mr. DOOLITTLE. But my point is—I understand that flood control isn't one of your objectives, but nevertheless, it's a key governmental purpose and yet you don't seem to add in that as part of your mix in the analysis. It's like it's just ruled out. And that seems—because since there is the flood control component, which moves toward an Auburn Dam, if you added to it your consideration of adding more high quality water to the system, those two could work synergistically. Instead, they're forced to remain in isolation from one another. That's the part that seems very strange to me.

Mr. SNOW. Well, we're not attempting to have them in isolation. And to make sure that I'm not misleading—we have not ruled out those options. I'm sure you're familiar with section 404 and the requirements you must go through and we must demonstrate that we have evaluated sites and screened sites properly, and they are all, as we speak, still on the table.

Now, the point I'm making, so that I'm not misleading you or this Committee, is that in our planning efforts, as we try to put these pieces together, on-stream storage—new on-stream storage—does not stack up as well as putting this comprehensive package together, as some of the opportunities with off-stream storage does.

Mr. DOOLITTLE. OK. In the abstract, I can understand that. I may not agree with it, but I can understand it. But, I mean, this isn't the abstract. I guess that's my point. This is something that's a very real thing. There are efforts right now to figure out what to do about the problem in Sacramento. Could I at least ask of you that you will take a look at this and let me know what you think?

Mr. SNOW. Yes, I will.

Mr. DOOLITTLE. I can see it's different than if I were just asking you to build a dam in the American River, where flood control was not a great concern. But it is a great concern. It's a driving concern.

Do you have further questions? Go ahead.

Mr. POMBO. Just quickly, Mr. Chairman. Mr. Snow, are you coordinating the activity between the proposal under CALFED to buy land for retirement, the proposal under the Delta wetlands project, the proposal that BLM and Nature Conservancy have—have you, at any point, sat down and looked at a map and started putting all of those different things together and looked at the impact that would have?

Mr. SNOW. We have attempted to make sure that our numbers are the total accumulative numbers of these activities, to make sure that, when we are expressing what we believe may be necessary to restore Delta smelt and salmon species and the kinds of habitats that are necessary, that those numbers are not additive to another HCP effort or BLM effort. So we believe that we

have put the marker down for the totals. And, I believe that we've included in that the Delta wetlands project.

Mr. POMBO. So your number includes the Delta wetlands?

Mr. SNOW. That's my recollection. I will have to check on that and get back to you.

Mr. POMBO. If you could answer that for the record for me, I would appreciate that.

Mr. GOLB. Mr. Pombo, if I might add one point. One thing that we've encountered with the land acquisition and the conservation program CALFED has undertaken is as you know, the State of California and the Federal Government owns nearly half the State. And State agencies, such Caltrans and others, own a tremendous amount of acreage, some of it in small tracks, some of it in large tracks. One thing that we've only briefly talked with Lester about is the concept of trying to utilize public lands first, before we acquire private land. It just seems to make sense from a cost perspective.

Mr. POMBO. Forty-nine percent is owned by the Federal Government; if you include State and local governments, you're up to about 56 percent.

Mr. GOLB. Well, it's a lot of land. Now some of it may not have the same ecological characteristics.

Mr. POMBO. Five hundred sixty million acres.

Mr. GOLB. OK. They may not have the same characteristics that CALFED is considering. But from an efficiency standpoint, it may be worth looking at.

Mr. POMBO. I would agree with you and that's something that this Committee has looked at in great detail—is the impact of the lands that are already owned by the public and this effort to take what—you know, less than half of California that's privately owned and make that public land as well. It has an impact on our cities, our counties, a huge impact on the economy of California. And I think everybody should realize just what an impact that would have.

Mr. DOOLITTLE. I did send you a letter, Mr. Snow, on the 26th of March, asking for certain information. And you wrote back and indicated that CALFED anticipates that significant changes will occur to the hydraulic capacity, physical features, water quality, and ecosystems at Bay-Delta.

What I was trying to get at—I mean, you recognize that you have some anticipation—I would like to know what are those significant changes and how will they be monitored? I mean, do you know what those are now, or is this something you simply believe there will be changes, but you don't know what they are?

Mr. SNOW. I don't recall the specific context that the sentence is in, but I think perhaps the context is simply in terms of the proposals—the three basic alternatives that we have—that would change the way the system functions. In terms of monitoring, there's two things.

One, there is a fairly extensive monitoring system that has been in place for nearly 20 years, collecting data. And it's the data base that has served to indicate that there are endangered species and water quality trends. We are building on that data base with the work that has been referenced here today, in terms of developing additional indicators so that we have a better yardstick to measure the changes and the progress on overall ecosystem restoration.

Mr. DOOLITTLE. Well, let me do this. Let me just send you and give you a chance to clarify this in writing, if I may. I'll give you the background, the letter, and everything. But I'd like to get a

more specific answer, if I can.

Mr. SNOW. OK.

Mr. DOOLITTLE. I'd like to thank all of you for appearing today. It's been a long day for you and you've been patient for us to vote here at the end. I think we've developed a lot of very interesting information at this hearing. We will, I'm sure, have further questions—we'll tender in writing and ask you to please respond expeditiously.

With that, the hearing will be adjourned.

[Whereupon, at 7:27 p.m., the Subcommittee adjourned subject to the call of the Chair.]

[Additional material submitted for the record follows.]

RESPONSE OF THOMAS M. BERLINER, GENERAL COUNSEL, SAN FRANCISCO PUBLIC UTILITIES COMMISSION TO THE "DISCLOSURE REQUIREMENTS" REQUIRED BY HOUSE RULE XI, CLAUSE 2(G)

- 1. Name: Thomas M. Berliner
- 2. Business Address: City Attorney's Office, 1390 Market Street, Suite 250, San Francisco, CA 94102
 - 3. Business Phone: (415) 554-295
 - 4. Organization you are representing:

The "Bay-Delta Urban Coalition" and the San Francisco Public Utilities Commission.

5. Any training or educational certificates, diplomas or degrees which add to your qualifications to testify on our knowledge of the subject matter of the hearing:

Doctor of Jurisprudence

6. Any professional licenses or certification held which add to your qualification to testify on our knowledge of the subject matter of the hearing:

Member, State Bar of California, District of Columbia Circuit, Ninth Circuit, United States Supreme Court.

- 7. Any employment, occupation, ownership in a firm or business, or work related experience which relates to your qualifications to testify on or knowledge of the subject matter of the hearing:
- Nineteen years of legal practice on behalf of the City and County of San Francisco, most of which has focused on water, energy, natural resources.
- Represented the San Francisco Public Utilities Commission before the State Water Resources Control Board, Federal Energy Regulatory Commission, Department of the Interior, and other regulatory agencies and legislative bodies concerning water and energy matter.
- Active member of the Bay-Delta Urban Coalition, the California Urban Water Agencies, and other industry organizations.
 - 8. N/A
 - 9. N/A
 - 10. N/A
 - 11. N/A

STATEMENT OF BILL PAULI, PRESIDENT, THE CALIFORNIA FARM BUREAU FEDERATION

The California Farm Bureau Federation appreciates the opportunity to provide comments on the future water needs of California and the Cal-Fed process for a long-term Delta solution. On behalf of its more than 75,000 member families throughout California, Farm Bureau is committed to solutions that will assure a reliable and affordable water supply for all Californians.

The California Department of Finance has projected that California's population will increase from the present 33 million people to nearly 50 million people by the year 2020. These additional 17 million people will not only need new water supplies, but they will also need a safe and reliable food and fiber supply. And, with more people, California will increasingly appreciate the open space provided by the farms and ranches that grace California which account for more than \$25 billion in direct revenues and generate \$12 billion in exports.

The Cal-Fed process provides an important opportunity for California to craft a collaborative plan that will satisfy a significant portion of the state's expected water demands for the next 30 years. Unfortunately, the Cal-Fed plan to date has fallen short of this goal. Most notably, Cal-Fed has been based largely on redirecting agriculture's two most fundamental resources—water and land—to satisfy other uses, rather than efforts to assure reliable and affordable supplies for farms, cities and fish. Even so, we remain cautiously optimistic that Cal-Fed can turn the corner and forge a plan that will benefit all of California, including its farmers and ranchers. To do this, we believe additional attention must be given to several key issues that will be critical to California in the 21st century, including increased surface water storage, minimizing the fallowing of agricultural land, and strengthening water rights.

Surface Water Storage

The California Department of Water Resources estimates that of California's total water use in 1995, 46 percent was dedicated to the environment, 42 percent to agriculture, and 11 percent to urban use. Additionally, millions of acre-feet of water flow out to the ocean above and beyond this water dedicated to the environment, farms and cities. Rather than redirect water from productive urban and agricultural uses, California must fully utilize and conserve water that now flows through streams to the ocean. By focusing on conserving outflow, California can minimize the risk of flooding, and save this water for other times, particularly for dry year use when cities, farms and fish need the water. The most effective way to conserve outflow is to to increase surface water storage in an environmentally sensitive manner. Increasing the capacity of existing reservoirs, such as Lake Shasta, Millerton Lakes, and Los Vaqueros are good examples of programs that can be used for the benefit of farms, cities and fish.

Agricultural Land Fallowing

Cal-Fed and other governmental programs have proposed to fallow more than 250,000 acres of prime agricultural land holding senior water rights. The overall fallowed acreage could easily approach one million acres. Agricultural land in California is a resource of global significance that, as a matter of good public and social policy, should not be converted to any other use. We recognize that new conveyance systems and reservoirs will require a certain amount of agricultural land to be taken out of production. In these cases, landowners must be justly paid and given adequate notice and opportunity to assure that their property rights are fully protected. The fallowing of agricultural lands for levee setbacks, shallow water habitats and other environmental purposes should be a

limited part of the Cal-Fed solution, due to the effects on local communities and government revenue. Instead, non-agricultural lands should be used for this purpose.

Water Rights

Assurances and particularly the protection of agricultural water rights are the key to the ultimate Cal-Fed solution. In many cases, old promises must be fulfilled before new promises to protect rural areas will have any credence. California's farmers and ranchers depend upon well-established water rights to maintain their livelihoods and way of life. Cal-Fed must assure farmers and ranchers that both their surface and groundwater rights will not only be protected, but will in fact be enhanced and strengthened by the Cal-Fed process. Most notably, Cal-Fed and the individual agencies should abandon plans to use groundwater in areas feeding the Delta as the future source of urban and environmental supplies under the guise of a conjunctive use program. Area of origin rights must also be fully recognized and strengthened by Cal-Fed.

Federal Appropriations

We cannot support the continued investment of public money in the Cal-Fed process as long as California's farmers and ranchers bear a disproportionate burden of a long-term Delta solution. Farm Bureau supported Proposition 204 as a down payment to secure major improvements in water management in the Sacramanto-San Joaquin Delta. Unfortunately, to date, both Proposition 204 and Federal appropriations have been used in large part to fallow agricultural land and set the stage to redirect agricultural water to other uses. This means that California agriculture is moving backward, not forward, as we have all been promised in the Cal-Fed process.

We continue to support the need for a long term Delta plan, but we are losing confidence that the ultimate Cal-Fed solution will contain meaningful components, such as water storage, that will benefit farmers and ranchers in all parts of the state. We are also very concerned about Cal-Fed's proposal for large-scale fallowing of our state's valuable farmland and the associated effects on rural communities. It is therefore impossible for us at this time to support a continuing Federal appropriation for Cal-Fed until we see marked improvements in the program to benefit California's farmers and ranchers.

In closing, the California Farm Bureau Federation will submit detailed and constructive comments to the Programmatic EIS/EIR for the Cal-Fed program as well as the associated documents. We are optimistic that the Cal-Fed process will turn the corner and begin to focus on efforts that will benefit California's farmers and ranchers and will make significant strides toward satisfying California's water demand for the next 30 years. We look forward to working with you in this process.

STATEMENT OF MARTHA DAVIS, BOARD MEMBER, MONO LAKE COMMITTEE AND THE SIERRA NEVADA ALLIANCE

Good afternoon, Chairman Doolittle, and Subcommittee on Water and Power Resources. Thank

you for your invitation to speak before you today.

My name is Martha Davis. I have worked for over fourteen years on California water issues. For thirteen of those years, I was the executive director of the Mono Lake Committee, a 17,000 member citizen's group dedicated to the protection of Mono Lake in the eastern Sierra. A major component of the Committee's work focused on helping the City of Los Angeles to develop local conservation and water recycling programs so that saving Mono Lake would not impact the San Francisco Bay Delta or the Colorado River. As a result of this experience, I have a working familiarity with the urban water needs of California and, in particular, those of Southern California.

I stepped down from this position last year, but have continued to work on California water issues in various capacities. I currently serve as a member of the CALFED program's Bay Delta Advisory Committee (also known as BDAC) at the recommendation of Governor Wilson. In addition, I serve on the board of directors for the Mono Lake Committee, the Sierra Nevada Alliance and the Bay Institute of San Francisco.

I strongly support the CALFED process for seeking a solution to California's complex water issues. It is a process that is profoundly reshaping the way in which the State is thinking about its water future.

CALFED's task of laying out a blueprint for that future is far from complete. The draft CALFED program elements and environmental assessment documents have just recently been released for public comment. We are all sifting through thousands of pages of text and charts, trying to decipher if the assumptions and technical evaluations performed by CALFED are valid and whether the program elements contained in each alternative are adequate to ensure the best water future for California.

My State is not the only potential beneficiary of the CALFED program. States from the Pacific Coast to the rocky mountains, along with Canada, Alaska and Mexico, will benefit from improved fisheries, enhancement of the habitats within the Pacific Flyway, and increased water availability which will come from better management of the California's water supplies.

One of the major and potentially most troubling technical "gaps" in the CALFED analysis is the assumptions it uses about "how much" water California used in 1995 and "how much more" California will need by the year 2020 to meet the State's future urban and agricultural water needs. CALFED embeds these core assumptions into the "no action" scenario. And it is this scenario which serves as the baseline in the environmental analysis against which both the impacts and the benefits of the proposed Bay-Delta programs and alternatives are measured.

To estimate the 1995 and 2020 water needs, CALFED relied heavily upon the urban and agricultural water demand projections presented in the draft California Water Plan. Usually referred to as Bulletin 160-98, this document is prepared and updated by the State Department of Water Resources every five years.

The most recent version of Bulletin 160 was only released for public review four months ago, and now the accuracy of the DWR projections are being questioned by many people in California. Pages upon pages of comments and concerns have been sent to DWR seeking clarification and correction of Bulletin 160-98. Some have even called for an independent evaluation by outside experts. I have attached to my testimony examples of comments provided by several organizations.

Bluntly, the concern is that DWR has greatly overstated the State's urban and agricultural demand projections and substantially underestimated the potential for urban and agricultural water conservation and opportunities to recycle water. If this is true and the assumptions are not corrected in the CALFED analysis, then facilities may be proposed for construction that may not be needed in the next two to three decades—if ever. Further, if the proposals proceed as drafted, taxpayers could be facing costs as high as \$8 to \$14 billion dollars—and it is assumed that the CALFED program can not go forward without significant new Federal funding.

I have reviewed DWR's Bulletin 160-98 urban water demand projections and they do raise some troubling issues. Let me focus on the South Coast region as an example:

- B160-98 estimates that urban water usage in the South Coast region was approximately 4.3 million acre-feet in 1995. Yet the actual urban water usage for this region in 1995 was about 3.5 million acre-feet. This means that for 1995—the baseline year for the CALFED analysis—DWR overestimates urban demand by almost one million acre feet—and this is for just one of ten regions included in Bulletin 160-98. Inexplicably, DWR chose to use estimates of water demand for 1995 rather than the real data from 1995 that should have been readily available at the time of the analysis.
- B160-98 assumes that few additional urban conservation measures, above what is being done now, will be implemented in the South Coast region by 2020. DWR's explanation for is that the South Coast region has already "achieved" the goals set by DWR for conservation and so more does not need to be done. This assumption flatly contradicts the positions of the Los Angeles Department of Water and Power and other water agencies in the South Coast who are committed to continued implementation of urban demand management programs. As a result, B160-98 effectively overstates future water needs in the South Coast region.
- B160-98 drops from the final water accounting a substantial amount of water from its own estimates of the potential savings that could be achieved through through these measures. For example, DWR identifies over 500,000 acre-feet of potential conservation for the South Coast region, but only includes 90,000 acre-feet of this water in its final 2020 demand projections. Similarly, DWR identifies the potential to develop over 800,000 acre-feet of new water supplies from recycling and desalinization projects, but only "counts" 200,000 acre-feet in the final water balance. As a result, demand management programs for the South Coast region appear to be underestimated by at least one million acre feet for the year 2020.
- B160-98 includes the assumption that the CALFED program will be fully implemented by the year 2020, but then uses this assumption to limit the potential contribution of conservation and recycling measures in meeting California's 2020 water needs. Inexplicably, DWR incorporates into the analysis its own idea of what the CALFED Bay Delta preferred alternative is likely to be, (even though one has yet to be selected) but fails to provide a description of what this alternative is. Further, DWR assumes that the CALFED program, along with other options, will provide more water to the South Coast at less cost than many conservation and recycling projects.
- Finally, B160-98 assumes that there will be no technological improvements in water efficiency programs in the South Coast region over the next twenty years. This is assumption is inconsistent with our experience over just the last five years where major improvements in urban conservation

technology have been coming on line every year. To underscore the point, it is hard to believe that just ten years ago, the Las Virgenes Municipal Water District in the South Coast region had to import low flow toilets from Sweden for its conservation program because none were produced in the United States. Today, low flow toilets are federally required and manufactured by all major plumbing suppliers in the country.

These are examples of some of the problems with B160-98. But the concerns that have been expressed by others go far beyond these points, and include criticism of the economic assumptions incorporated in B160-98, its planning methodology, and DWR's use of outdated technical assumptions in evaluating water efficiency programs.

The bottom line is that B160-98 appears to present in part a distorted and inaccurate picture of both current and future California urbanwater needs. It does this by artificially inflating urban demand figures for 1995 and 2020 and, paradoxically, minimizing the water efficiency measures that could help to meet projected State water needs.

Prior to 1990, many people were not familiar with water efficiency programs and were understandably skeptical about how reliably these programs could meet growing population needs. But the world has changed substantially since 1990, and most regions of the State have gone beyond talking about water efficiency programs and started implementing them.

The results are impressive. Let me give you three quick examples of success stories:

- 1. The City of Los Angeles. In the 1970's, Los Angeles used approximately the same amount of water as it is using today—only we are now serving almost 1 million more people. How did we do it? As recently as 1990, LA declared that it needed every drop of water from Mono Lake to meet the city's growing water needs. Since then, with support from title 16 Federal funds and AB 444 State monies, Los Angeles has invested millions of dollars in the distribution of hundreds of thousands of ultra low flow toilets and the development of other water efficiency programs. In addition, Los Angeles agreed to dramatically reduce its diversions from the eastern Sierra, and plans to meet its future growth through local conservation and recycling programs.
- 2. The Metropolitan Water District of Southern California. MWD and its member agencies have experienced similar success with their conservation programs. At the peak of the drought, MWD sold 2.6 million acre feet in imported water supplies (calendar year 1990). Since then, MWD developed its integrated resources plan, refocused its efforts on developing a more balanced mixture of local and imported water supplies, and helped the region to start to aggressively implement conservation, recycling and groundwater management projects. The result: MWD has reduced its imported water sales down—somewhat to its dismay—to 1.8 million acre-feet. This year is wet and MWD's imported water sales are likely to be even lower—possibly below 1.6 million acre feet. This dramatic reduction in MWD imported water sales means that Southern California using currently using only about 25 percent of its 2 million acre-feet contractural State Water Project supplies.

The South Coast region, through MWD and its member agencies, has taken a leadership role in the State on urban conservation. It is a model for other parts of California to follow. Now, the primary challenge facing MWD is to stay on this successful path. There are already signs that MWD is beginning to pull back on its current conservation commitments, paradoxically because the water is not seen as now being needed.

3. Panoche Water District. Urban water agencies are not only ones that are making substantial investments in improved water management. I recently visited Panoche Water District, which is located on the west side of the San Joaquin Valley and is part of the San Luis Unit of the Central Valley Project, to see the fine work they are doing in their drainage reduction program. In less than two years, the district has eliminated tail water flows, installed water efficiency irrigation systems and substantially modified its water management practices. The result: the district has reduced its drainage by 50 percent from dry year flows and is saving applied water. The program is impressive, demonstrating how valuable water efficiency measures can be to the agricultural community.

In closing, I want to underscore the obvious point: we all need to have good quality information about California's current and future water needs if we are to make the right decisions for California's water future. B160-98 does not appear to meet this test.

Too much is at stake, here in California and throughout the West, to accept less than an accurate, well documented presentation of the State's water demands. We, in California, need this quality information in order to assess and identify the right combination of measures to include in the proposed CALFED program. The mountain counties need it, Southern California needs it, Northern California needs it, the farmers in the Sacramento River Valley need it, the commercial and sport fisherman need it, the farmers on the east and west side of the San Joaquin Valley need it, the environmental community needs it, the business community needs it, the delta farmers need it, and the affected land owners need it.

Congress, too, needs this information in order to decide what level of Federal funding for future CALFED programs may be appropriate.

The potential implications for the CALFED program are profound. The assumptions of B160-98 are embedded in the analytical framework of the environmental documents. B160-98 must be critically evaluated so that, if needed, the CALFED technical evaluations can be redone. Only then will we be able to draw a conclusion about what is the best water alternative for California's future.

STATEMENT OF STEPHEN K. HALL, EXECUTIVE DIRECTOR, ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)

Mr. Chairman and Members of the Subcommittee, thank you for providing me an opportunity to appear before you today and submit this statement regarding CalFed's progress. I am the Executive Director of the Association of California Water Agencies (ACWA). As you likely know, ACWA is a statewide, non-profit association which represents more than 440 public water agencies who collectively manage and deliver 90 percent of California's urban and agricultural water.

California's water resources are finite, while its population and economy continue to grow. At last week's ACWA Spring Conference, Governor Pete Wilson announced that California grew by an additional 580,000 people last year; putting our population at 33,250,000. The State is projected to continue this growth spurt, which is why the Department of Water Resources recently projected a 3 to 7 million acre-foot annual shortfall in water supply by 2020.

No single demand side management or water supply development option can be implemented to address that pending shortfall and the attendant reliability concerns facing all stakeholders. Water

conservation alone cannot address the shortfall, water reuse alone cannot, new dams and reservoirs cannot, water transfers cannot. Parties can quibble about the details, but the bottom line is that in the very near future we are going to have too many demands on a system already stretched to the limit, and it will take a package of measures to fix the problem. That is why ACWA is participating in and strongly supports CalFed and its approach, which calls for a balanced package of additional storage, improved Delta conveyance, water conservation, reclamation transfers, environmental restoration and other measures. Clearly though, additional storage has to be among the elements that has high priority.

Our current system includes key projects like the Federal Central Valley Project (CVP) and California's State Water Project (SWP). The CVP has a storage capacity of 11 million acre-feet and delivers about 7 million acre-feet of water to agricultural and urban uses. The SWP delivers about 2 million acre-feet annually to farms and cities. The single most important aspect of California's complicated water system is the Sacramento-San Joaquin River Delta. Its channels through the state and Federal projects provide drinking water for two-thirds of the state, in addition to irrigation water for more than 4.5 million acres of the nation's most productive farmland.

This is an impressive system, but it is far less than what we see on other river systems. According to the California Department of Water Resources, total storage on the Sacramento River system with average annual runoff of 22 million acre-feet is less than one-year, or 16 million acre-feet. In comparison, the Colorado River system, with an average annual runoff of only 15 million acre feet, boasts a storage capacity of 60 million acre-feet, or enough for a four-year supply.

The lack of storage capacity has led to the tension between operating the system for flood control, the protection of life and property, and operating the system for water supply to meet the needs of the nation's largest economy. And the problem is growing worse. Since the last major element of our water management system was added in the early 1970s, the state's population has essentially doubled. Local water managers have done a good job in balancing this tension. Urban water managers have managed to meet the needs of the rapidly growing population through conservation, reclamation, and innovative water transfers and exchanges. Meanwhile, California agriculture is today producing 50 percent more in food and fiber with the same amount of water that it was using 20 years ago. We are also doing a better job of protecting lives and property. The floods that have occurred in recent years could have been far more devastating had it not been for strong efforts to coordinate the local, state, and Federal flood control operations. This remarkable record is testimony to the strides California's water professionals have made in managing the state's most important resource.

We can do more in the way of water management, and we will; however, the experience of 1997 has shown the deficiencies in our system that not even innovative management can overcome. The devastating floods of January 1997, followed by water delivery cutbacks later in the year, point out that our existing system must be improved and expanded in order to protect California from floods while maintaining a healthy environment and a strong economy.

That is why the California water community is strongly supporting a major water bond issue supported by Governor Wilson and carried by the two chairmen of the water committees in the state legislature. The bond issue will provide badly needed funds to study specific storage proposals,

focusing on conjunctive use and off-stream storage. It will also provide funds that are way overdue for additional flood control. It will provide funds for investments in safer drinking water, source water protection, and water conservation. In summary, this bond issue promises to give us a running start on some of the most important elements of the CalFed program.

Some may say it is premature to discuss storage at this point in the process because specific storage projects have not yet been selected by CalFed. However, those same people argued strongly two years ago that ecosystem improvements needed immediate funding, even though there were no specific ecosystem proposals at the time. Nevertheless, that funding was made available through a statewide bond issue and matching federally authorized funds. Now, it is time to move forward on water supply and water quality measures, which are equal in importance to ecosystem restoration.

Another issue raised by critics of this bond measure is that a general bond measure that pays even for studying storage constitutes a subsidy to water users. The argument has already been addressed, since the bond issue provides that the beneficiaries will pay the full cost of any water supply that is ultimately generated. It should be noted that storage has public benefits and therefore should be—in part—paid with public funds.

The conclusion we have drawn is that we must move forward soon on improvements in water supply and water quality, and that this bond measure provides an excellent opportunity to begin that forward movement. If we fail to act now, it will be two years before we can bring another bond measure before the voters, and that will put us two years farther behind in meeting our needs. We believe Californians should have the opportunity now to tell water managers and policy makers whether they support public investment in promoting improved water supply and quality.

Virtually all parties agree that CalFed is an historic opportunity to address critical water problems in the state, both for the environment and our quality of life. In order for CalFed to deliver on that promise, it has to produce a balanced plan that truly provides for California's present and future needs. That will mean the plan has to contain all of the elements listed in the opening paragraphs of this testimony. Every credible projection of California's water demands and supply show this to be the case.

In decades past, California met its water needs by simply adding more storage or conveyance. For the past three decades, we have focused on managing demand to stretch existing supplies. Now, maybe we can strike a balance between the two, and address them in tandem rather than to the exclusion of one or the other. CalFed is the vehicle to strike this balance. The current water bond issue is an excellent way to fuel that vehicle. We support both and we are urging others to do the same.

STATEMENT OF ROBERT G. POTTER, CHIEF DEPUTY DIRECTOR, DEPARTMENT OF WATER RESOURCES INTRODUCTION

Mr. Chairman and members of the Subcommittee, thank you for providing me an opportunity to

submit this statement regarding financing the CALFED Bay-Delta Program. My name is Bob Potter. I am the Chief Deputy Director for the California Department of Water Resources. The Department of Water Resources operates and maintains the State Water Project and prepares and updates the California Water Plan. I represent the Department on the CALFED Policy Group.

It's too soon to get too specific about financing the CALFED program given that we haven't yet identified a preferred alternative, much less gained agreement to proceed on implementation. Nevertheless, there are a number of factors and principles that should be considered as we prepare for implementation.

BACKGROUND FACTORS

- The Central Valley Improvement Act of 1992 took 800,000 af of CVP yield away from CVP farms and cities and allocated it to the environment.
- The Delta Accord of 1994 took 1,000,000 af of combined CVP/SWP yield away from California cities and farms and farmers and allocated it to the environment.
- Thus far, there has been no compensation provided to ag and urban water users for these reallocations.
- At this point in time there is no clear picture of how much water supply will be provided by the CALFED program or how those supplies will be allocated.

SOME PRINCIPLES

- There is support for the concept of user pays. There is also support for the concept of beneficiary pays. Generally in California we all use water and we all benefit from our states healthy economy which is supported in no small part by reliable water supplies provided by State and Federal water development programs.
- Many years ago when I was just beginning my career in water the U.S. Senate published its famous "greenbook" which provided detailed procedures for allocating costs in recognition of beneficiaries gains. Water planners struggled mightily over the years to implement these procedures. Given the complexity of the CALFED package sorting out the beneficiaries will prove to be a real challenge.
 - Generally speaking on public policy we return to equity not economics in arriving at who pays.

CLOSING

The State of California has been and remains committed to the CALFED process. The Governor supported Proposition 204 which provided nearly \$400 million for CALFED environmental programs. The Governor has proposed an additional water Bond measure for this fall. This Bond measure would provide additional "seed money" to finance the first phase interim CALFED programs. It would appear that there will eventually need to be a larger Bond measure to finance some or all of the roughly \$10 billion CALFED package.

LETTER FROM HON. PETE WILSON, GOVERNOR, CALIFORNIA May 4, 1998

The Honorable JOSEPH M. MCDADE, Chairman, Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. House of Representatives, Washington, DC 20515

Dear Mr. Chairman:

I would like to take this opportunity to share with you California's priorities among the programs funded through the energy and water development appropriations bill.

My top priority continues to be full funding of the \$143.3 million requested in the President's budget as the initial Federal contribution toward the restoration of the San Francisco Bay-Delta I appreciate the \$85 million provided for this program by Congress in fiscal year 1998. We will spend that money wisely and expeditiously. The watershed feeding the Bay-Delta is the source of nearly half the nation's fruits and vegetables, as well as drinking water for 22 million Californians. Environmentalists, farmers, and urban water users have all banded together with numerous state and Federal agencies in an unprecedented coalition to find a non-litigious solution to the water disagreements that have long plagued our state.

I have a number of other priorities funded through your bill that I encourage you to support:

Corps of Engineers

- a \$49 million increase to the \$11 million budget request for the Los Angeles County Drainage Area Project. This authorized project is exceedingly well justified from an economic perspective, and is vital to protect lives in this burgeoning area of the country. The small amount requested in the budget would significantly delay completion of the project and pose unacceptable risks to public safety. Non-Federal sources will contribute 25 percent of the cost of the project.
- a \$56 million increase to the \$20 million requested for the Santa Ana River Mainstem project, for continued construction at Seven Oaks dam, work on the Santa Ana River, and beginning construction of Prado Dam. Three million people live in the area that will be protected by this project, where a major flood could cause \$15 billion in damages and threaten countless lives. Non-Federal sources will contribute 35 percent of the cost of the project.
- a \$4 million increase to the budget request for the Corps of Engineers, under section 206 of the Water Resources Development Act of 1996, as the Federal half of the costs of completing the environmental restoration at the abandoned Penn Mine in Calaveras County, California.
- a \$500,000 increase to the budget request for the Corps of Engineers as a Federal contribution to cooperative efforts with California local governments to control the invasive non-native plant arundo. Arundo is a giant reed that is established in the San Gabriel River watershed and is rapidly invading the Santa Ana River watershed. It destroys native fish and wildlife habitat, consumes great

quantities of water, and clogs water channels to the point where flood damage is greatly increased. Arundo is among the increasing number of invasive species posing significant economic and ecological problems in California and around the country. The increase would be divided between the intergovernmental Team Arundo that operates in the Santa Ana watershed (\$100,000), and its counterpart Team Arundo Angeles that would use \$400,000 to eradicate arundo from the Whittier Narrows area of the San Gabriel River watershed.

Bureau of Reclamation

- an increase of \$5.2 million in Bureau of Reclamation construction funding for continuing work on a permanent pumping plant to increase water supply reliability for the Placer County Water Agency and reduce Federal costs over the long term. This funding would be in lieu of the up to \$1 million that has been annually spent for more than thirty years by the Bureau to install a temporary pump to fulfill its contractual obligation.
- an increase of \$5.2 million above the Bureau of Reclamation's \$12.3 million budget request for the Colorado River Salinity Control Program, funded through the Water and Related Resources account. This increase, coupled with the non-Federal cost share, would begin to work down the backlog of worthy proposals needing funding.
- a \$3.1 million increase to the \$1 million request for environmental and engineering studies, and flood easements in the area of Arroyo Pasajero. This work is necessary to protect the vitally important California Aqueduct against flood damage, and to protect lives in the communities in the immediate vicinity of Arroyo Pasajero.
- an increase of \$600,000 to the budget request for the Bureau of Reclamation's Regional Wetland Development Program, to be highly leveraged by state and local matching funds, for wetland restoration and floodplain management at Trout Creek near South Lake Tahoe, California. Although the Clinton Administration generated much press activity with respect to Lake Tahoe last summer, the budget request for programs to actually restore the lake is disappointing. My state budget for the coming fiscal year contains \$11.5 million in new funding, contingent on new matching Federal funding.
- an increase of \$3.7 million to the disappointing and token \$250,000 budget request to continue work on fish screens at Rock Slough for the Contra Costa Canal. These screens are required by the Central Valley Project Restoration Act, and will address endangered species issues facing Contra Costa County. Interior has never requested the necessary funds for the project, although non-Federal funds are available to cover the 25 percent match. Thank you for providing \$1.5 million for this project in fiscal year 1998. I urge you to provide \$4 million in fiscal year 1999 so the project can stay on schedule.
- a \$400,000 increase to continue the Sacramento River Winter-Run Chinook salmon captive broodstock program, which is in its seventh year and has demonstrated biological and technological successes that will contribute to salmon conservation in other regions.

I also urge you to support the \$49.5 million requested in the Bureau of Reclamation's budget for the Central Valley Project Restoration Fund. These monies are for environmental restoration in the area affected by the Federal Central Valley Project, and are actually funded by payments from water and energy users.

Finally, I urge you to significantly increase funding for the Corps of Engineers for navigation, port, and harbor projects, including navigation studies, engineering and design work, construction, and operations and maintenance. The large cut in the President's budget for the Corps of Engineers is economically unjustifiable, and if enacted, would severely hamper America's competitiveness in international trade.

Thank you very much for your consideration of California's priorities. Sincerely,

Pete Wilson, Governor.

STATEMENT OF DR. TIMOTHY H. QUINN, DEPUTY GENERAL MANAGER, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ON BEHALF OF THE BAY-DELTA URBAN COALITION
Introduction

Mr. Chairman and members of the Subcommittee, thank you for providing me an opportunity to submit this statement regarding financing the CALFED Bay-Delta Program. My name is Timothy Quinn. I am a Deputy General Manager for the Metropolitan Water District of Southern California, although I am appearing today on behalf of the Bay-Delta Urban Coalition. The Bay-Delta Urban Coalition (Urban Coalition) represents urban water agencies from northern and southern California that supply drinking water to over 20 million Californians.(see footnote 1)

The members of the Urban Coalition have been active participants in the CALFED Bay Delta process since its inception and are committed to working though CALFED to hammer out the best solution package. The next six months will be a critical decision-making period for the CALFED agencies and all the interested stakeholder groups. The challenge will be to craft a solution that provides broad benefits throughout California—for the environment and for urban and agricultural water users.

This brief statement is intended to answer the questions raised in the letter of invitation to this panel by enunciating several key principles which the urban community believes will be central to the development of a viable financing package for a preferred CALFED alternative.

1. The finance plan must be founded on a CALFED solution that produces widespread value.

With California expected to grow in population to nearly 49 million people by the year 2020, one of the major challenges we face is how to provide a sufficient, safe, reliable water supply to meet the needs of households, industries, farms, and the environment. Although still a work in progress, the

CALFED process has made more progress and has a greater chance of ultimate success than any of the previous efforts to tackle this problem during the last three decades. After years of conflict and a shrinking water resources pie, for the first time in a generation, California has the opportunity this year to make major decisions that will create value for a wide range of interests. Any successful financial plan must, first and foremost, have the foundation of a preferred alternative that generates value for those who will be asked to pay a portion of the costs, whether through increased water rates or higher taxes.

For the environment, the CALFED ecosystem restoration program will be historically unprecedented anywhere in the nation. Already underway with state and Federal funds provided by California Proposition 204 and the 1996 California Bay-Delta Environmental Enhancement Act, the habitat improvements of the CALFED ecosystem restoration program will fortify our efforts to achieve the restoration goals of the Central Valley Project Improvement Act. For urban California, an effective CALFED solution has the potential to substantially improve source drinking water quality and provide a stable transportation and storage infrastructure that will be required to meet the needs of a growing economy. (In a 1996 public opinion poll, 9 out of 10 Californians stated we need a sufficient, reliable and affordable water supply to maintain a strong economy. For agricultural interests, the CALFED program can provide assurances that we will sustain the largest agricultural economy in the nation while transitioning to a new regime of natural resources management that will meet the environmental and economic needs of the twenty-first century.

Beyond California, improvements in the Bay-Delta estuary will favorably impact aquatic and avian ecosystems in other western states. The Bay-Delta system provides the largest wetland habitat and estuary in the West. It supports 750 plant and animal species, some found nowhere else in the nation. It is a critical part of the Pacific Flyway over which hundreds of migrating birds travel each year from Mexico to the Canadian border.

Just as the CALFED program must generate widespread benefits, funding must be made available from diverse sources. Members of the Urban Coalition have long supported user fees paid by those in urban and agricultural areas who use water as a primary source of funds to pay for a CALFED solution. The benefits to water users from improved water quality and reliability will be substantial and, accordingly, they should be willing to pay an appropriate share of program costs. Similarly, many of the benefits of a CALFED solution will be broadly enjoyed by the public at large, and state and Federal financial resources should be available to pay a portion of program costs. Of course, no specific allocation of costs can be identified until the CALFED preferred alternative is selected later this year.

2. CALFED Must Aggressively Pursue Cost Containment While Maintaining Benefits.

A second fundamental principle is that the CALFED program must provide benefits at the lowest possible cost. Current estimates of the overall costs of the CALFED program range from approximately \$9 to \$11 billion. Quite frankly, we believe these cost estimates are considerably inflated and the potential value of a CALFED solution can be obtained at a substantially lower cost. The Urban Coalition is committed to work with the CALFED agencies and other stakeholder

interests to aggressively pursue cost containment strategies which will assure any preferred alternative is implemented at the lowest possible overall costs.

3. Costs Should Be Shared Consistent With the Beneficiaries Pays Principle and Allocated in a Mutually Agreeable Manner.

The Urban Coalition is committed to the principle that beneficiaries must pay for the value received from a CALFED solution. At the same time, we are concerned if this principle is implemented in an arbitrary manner it could result in imposed costs on some water users which are not matched in their view by commensurate benefits. For this reason, we believe that as part of the broad negotiations required to define and implement the CALFED Bay-Delta program, costs should be allocated on a mutually agreeable basis. This approach would provide all parties who have a significant financial stake with a voice in the determination of who benefits and how they are expected to pay. This principle should be applied equally to water agencies and to taxpayers, and be implemented through appropriate regulatory and legislative procedures and/or a vote of the citizens.

The purpose of this third fundamental principle is to assure all interests which provide major financial support can determine for themselves that they expect to receive benefits which justify their costs. This principle also creates a strong linkage between cost allocation and the CALFED assurances package. No interest group will be inclined to pay a portion of the costs of the CALFED program unless they believe the assurance package guarantees a flow of benefits commensurate with their cost allocation.

4. The Financial Plan Should be Based on a Prospective Assessment of Value and Not a Retrospective Assignment of Blame.

The goal of the CALFED program is to realize both early-start and long-term benefits to the environment and economy of California. To be successful, the CALFED process must be forward looking. For this reason, the Urban Coalition believes that basing financial decisions on perceptions of past responsibilities for mitigation or damage payments is counter productive. Human activities and social policies have affected the Delta ecosystem for over 100 years, beginning with hydraulic mining processes and reclamation in the 1800's, as well as many other natural processes. While water diversions from the watershed have undoubtedly affected the ecosystem, many other human activities have also affected the Delta. We believe that it is impossible to prove the level of damage attributable to individual factors to the satisfaction of all parties. Focusing on blame for past acts will not lead to solutions; it will only lead us back into divisiveness and the regulatory and political gridlock that CALFED has allowed us to escape.

Conclusion

Ultimately, CALFED financing decisions must be based on a prospective assessment of anticipated value from the proposed solution and a willingness to pay as expressed by all the

financial participants. Although program costs will be substantial, so too will be the value for California and the nation of a successful CALFED program. We in the urban community are dedicated to working with you, Mr. Chairman, members of the Subcommittee, and all others in the process to identify a feasible financial plan which will allow us to implement an affordable CALFED plan that generates enduring value for the environment and for the urban and agricultural economies of California.

STATEMENT OF RICHARD K. GOLB, EXECUTIVE DIRECTOR, NORTHERN CALIFORNIA WATER ASSOCIATION (NCWA)

Mr. Chairman, members of the Subcommittee, my name is Richard Golb, I am the Executive Director of the Northern California Water Association (NCWA). NCWA is a non-profit association representing sixty-six private and public agricultural water suppliers and farmers that rely upon the waters of the Sacramento, Feather and Yuba rivers, smaller tributaries, and groundwater to irrigate over 850,000 acres of farmland in California's Sacramento Valley. Many of our members also provide water supplies to state and Federal wildlife refuges, and much of this land serves as important seasonal wetlands for migrating waterfowl, shorebirds and other wildlife. I would appreciate the Subcommittee's inclusion of my written testimony in today's hearing record.

The Subcommittee's interest in the CALFED Bay-Delta Program (CALFED) and specifically the allocation of Federal funds for ecosystem restoration is appropriate given the importance of a successful resolution to the environmental and water supply problems in the Sacramento—San Joaquin River Delta and San Francisco Bay (Bay-Delta). The Bay-Delta is a tremendous economic and environmental resource to California and the Nation, and there is much at stake in how CALFED implements its ecosystem restoration actions. CALFED's response to the Subcommittee's questions will also be useful for private interests participating in this process.

I appreciate the opportunity to provide NCWA's perspective on CALFED. NCWA has actively participated in the CALFED process, as a signatory to the 1994 Bay-Delta Accord and a participant in the development of California's Proposition 204 and the Federal Bay-Delta Security Act (Public Law 104-333). Two representatives of NCWA's Board of Directors, Chairman Tib Belza and Director Don Bransford, serve on CALFED's Bay-Delta Advisory Council, and I am a member of the Ecosystem Roundtable—the entity chartered to allocate state and Federal ecosystem restoration funds.

The specific questions the Subcommittee has posed focus directly upon evaluating the effectiveness of Federal funds appropriated to partially finance CALFED's ecosystem restoration programs and projects, some of which are years away, and some of which are now underway. The Subcommittee has also requested our perspective on whether CALFED should implement its plan as designed or amend it based upon the principle of adaptive management. Similar questions have been raised by California's Legislature, local governments, by CALFED's Ecosystem Roundtable and by public and private interests with an immediate stake in efficiently achieving environmental restoration with limited resources.

1. How do we evaluate the effectiveness of the funding we are providing?

CALFED's draft Ecosystem Restoration Program establishes specific objectives, targets and programmatic actions designed to accomplish CALFED's overall mission "... to develop a long term comprehensive plan that will restore the ecosystem health and improve water management for beneficial uses of the Bay-Delta ecosystem." If successful, the plan should rehabilitate native fish and wildlife species and their habitat in the Bay-Delta system, and increase water supplies and reliability for California's cities, businesses and farms. One measure of success of the overall program is an improving environment, achieved in part by implementation of restoration projects that resolve known problems. For example, the installation of fish screens on agricultural diversions to prevent the entrainment of fish species. Program success will also be indicated by decreasing regulatory disruption of water project operations, and reduced regulations on individual agricultural water suppliers and farmers.

Many of the private interests following CALFED, such as Sacramento Valley agricultural water suppliers and farmers, are financially participating in cost-share arrangements with CALFED agencies on specific restoration projects. Nearly a dozen water suppliers throughout the Sacramento Valley are engaged in the study, design or construction a fish screen or passage project to protect candidate, threatened and endangered fish. Some of these projects are now complete, such as Western Canal Water District's Gary N. Brown Butte Creek Siphon Project. This unique project resulted in the installation of a concrete siphon to convey agricultural water supplies under Butte Creek, allowing the removal of several small dams that historically hindered spring-run salmon migration to spawning habitat. Completion of this project illustrates the effectiveness of restoration actions in providing immediate benefits to the environment—in this case for spring-run salmon, presently listed as a threatened species under California law and proposed for Federal listing—and for the local community and area farmers who benefit through development of a more reliable water supply.

As with Western Canal's farmers, other agricultural water users in the Sacramento Valley have a vested interest in ensuring state and Federal funds are effectively managed to ultimately improve the fishery, and alleviate regulatory mandates. Their participation is based on the belief the projects will succeed, and are an effective way to restore salmon species and protect landowners from burdensome regulations. Their financial stake in these projects means they will actively oversee the government agencies carrying out the projects.

2. What clear and unambiguous performance standards are being adopted to determine if we are close to success or have achieved success?

As this Subcommittee is well aware, it is difficult to establish performance and monitoring standards on complex and dynamic ecosystems, such as California's Bay-Delta. State and Federal resource agencies, and private interests, have encountered similar difficulties in assessing the effectiveness of restoration in the Pacific Northwest and the Florida Everglades. Moreover, CALFED will attempt to apply its yet to be developed standards on specific projects, and the entire

program, in an ecosystem that has sustained natural and human damage; which continues to change. Complicating this task is task is a lack of full biological information of the effects these continuing natural and artificial processes have on fish and wildlife, and their habitat. Additionally, natural events can overwhelm our best efforts and mask success. Wildfires in the Shasta or Sierra watersheds, drought, or damaging winter storms—such as the 1997 storms that produced the worst flood in California history which swept millions of young salmon prematurely to the Pacific Ocean—can devastate fish and wildlife and their habitat.

An additional difficulty in assessing this program's success, and its individual actions, is CALFED's plan to implement projects that will replicate natural processes associated with instream flows, stream channels, watersheds and floodplains. CALFED proposes to accomplish this objective primarily by the acquisition of farmland and water supplies to create river meander corridors, riparian forests, and increased instream flows. The proposed implementation of these particular actions raises legitimate concerns for upstream and downstream communities, landowners and water suppliers.

CALFED's Ecosystem Restoration Program recommends the implementation of nearly 700 actions over a thirty year period, however, work has already begun on several of the program's main elements. For example, CALFED's draft environmental impact report and impact statement, released in March, recommends the acquisition of roughly 200,000 acres of Central Valley farmland (30,000 acres in the Sacramento Valley) to meet certain goals outlined in the Ecosystem Restoration Program. CALFED proposes to allocate \$14 million in fiscal year 1998 Federal funds to acquire private property in order to create meander corridors along the Sacramento, San Joaquin and other Central Valley rivers.

CALFED's staff acknowledges the scientific uncertainty underlying the potential benefit to fish and wildlife from these actions. River meander and riparian forest projects necessarily require the acquisition of land along a river or stream in order, for example, to allow the river to inundate land during high flow periods. There are numerous consequences that may arise as a result of these projects, including river level and flow fluctuations and increased sediment and debris loading, which threaten existing water diversions and fish screens. Due to the unpredictable nature of these projects, and the risks they present, NCWA encourages CALFED to initially focus on restoration actions that fix known fish and wildlife problems. We recognize, however, a limited number of actions that attempt to replicate natural processes may be necessary to restore habitat for at-risk species.

There are several specific steps CALFED should consider before embarking on a large-scale river meander plan in order to avoid adverse social, economic or environmental affects to local communities, landowners, and water suppliers. This is consistent with CALFED's stated principle of implementing actions and a long-term plan that does not result in the redirection of adverse impacts.

NCWA has encouraged CALFED to consider adoption of a pilot program that may serve as a model for its future projects involving land acquisition. Although the specific principles of our recommendation are still under development, our goal is to accomplish restoration actions compatible vith economic activities, including farming, water district operation and flood control protection.

A first step is to attempt to utilize public lands with similar ecological characteristics prior to

acquiring private property to achieve restoration measures. If public lands are unavailable, conservation easements, rather than outright fee title acquisition, should be a priority, and all acquisitions must be voluntary. Completion of California Environmental Quality Act and National Environmental Policy Act requirements should be initiated before the acquisition of private property. In cases where California Environmental Quality Act compliance is not required, such as the acquisition of rights to allow an existing levee to degrade and fail, a representative public process should be developed to determine the selection and implementation of specific actions. Establishment of a representative public process to ensure local involvement must be a cornerstone of any land acquisition program. Finally, CALFED must adopt clear assurances, or legal guarantees, that address issues of liability for future damage resulting from project implementation, as well as local tax and assessment responsibility.

3. Are we going to postpone any major program decisions or alternatives until we have the results of the early phases? Or are we going to agree on a basic blueprint and simply adjust it through adaptive management as we move along?

It is our understanding CALFED intends to utilize adaptive management in its implementation of the overall plan, including the staging of various program elements such as new storage projects—which will provide additional instream flows. Certain features of CALFED's Ecosystem Restoration Plan should be implemented now, especially projects that will resolve known problems and provide immediate environmental and economic benefits.

California's recent response to the declining spring-run salmon population is a good example of the benefit of implementing broad based restoration actions before the species is listed under Federal law, and the ensuing regulatory gauntlet hampers all voluntary recovery efforts. The United States' recent listing of the steelhead as threatened, and the proposed listing of the fall-run, late-fall run and spring-run salmon are further incentive to initiate restoration actions now that will hopefully alleviate punitive Federal regulations later. Adaptive management is a useful tool to guide project selection and implementation given dynamic natural conditions, such as drought and floods. Projects that require additional analysis to determine their merit should be delayed, or implemented on a pilot project basis, until CALFED has established a better biological baseline, and expectation, of their potential benefit.

In conclusion, NCWA supports additional Federal funding for the CALFED program consistent with the Federal Bay-Delta Security Act, and we offer our continued assistance to Congress and the Subcommittee on Water and Power to respond to these issues in the future.

STATEMENT OF DICK DICKERSON, PRESIDENT, REGIONAL COUNCIL OF RURAL COUNTIES

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITEE:

I want to thank you for the opportunity to provide testimony on behalf of the Regional Council of

Rural Counties (RCRC) to the Subcommittee with regards to the CALFED Bay-Delta Program's, public participation program.

I am the President of the RCRC, and organization of twenty-seven rural California Counties. Our membership encompasses a broad geographic area stretching from the shores of Mono Lake to the shores of Clear Lake, from the valley floor of Yosemite to the top of Mount Shasta, from the rich farmlands of the Sacramento and San Joaquin Valley to the dense Sierra forests. Our members are located within San Joaquin, Sacramento and Trinity Watersheds. Collectively, our members are the "source" areas for the San Francisco Bay-Delta. It is from our membership that over eighty percent of the water for the Delta comes. Our twenty-seven member counties number nearly half of all of California's fifty-eight counties.

The forests from within our membership area include the most significant snow pack areas in California. The water storage in those snow packs dwarfs the capacity of all of the reservoirs in the state. Snow melt during the spring and summer months is what keeps the Delta ecosystem alive. The health of the watersheds in our membership areas are, to the great extent, the early indicators of the health of the Delta's ecosystem not by any law of man, or map in a Federal office, but by the laws of nature. Any successful Bay-Delta solution will depend upon actions in our membership area, to implement ecosystem restoration, watershed management, water transfers, new water storage facilities and existing storage re-operation.

The Congressionally ordered Sierra Nevada Ecosystem Project Report, completed in 1996, concluded that the most valuable resource in that mountain range was water. Water accounted for sixty cents of every dollar of all natural resources values including timber, mining, recreation and grazing. Water is not only the lifeblood of the Delta ecosystem it is also the liquid gold of California's economy.

RCRC has participated in the CALFED Bay-Delta program since early 1996. Through the past two years we have actively supported a CALFED solution and willingly worked to achieve a balanced solution. We have worked very hard to assure that there would be a watershed restoration component in the CALFED Common Program Elements. We strove to develop an Ecosystem Restoration Program Plan, which would be grounded in reality and site specific—taking advantage of local expertise. We have advocated an open public process not only in the current CALFED program, but also in actual implementation actions and governance.

RCRC is represented in the CALFED process at three levels. Our Water Committee Chairman (Robert Meacher, Plumas County), serves on the Bay-Delta Advisory Committee (BDAC). Our water and natural resources consultant John S. Mills, services the Ecosystem Restoration Roundtable. Mr. Meacher, Mr. Mills and other RCRC elected officials and staff also participate in numerous BDAC work groups such as; ecosystem restoration, water transfers, assurances, and finance.

The expectation for adequate public participation within CALFED is predicated on the ability of the public to understand the subject matter. To have the opportunity to meaningfully express their interests and concerns to those making decisions and for those making the decisions to evaluate and respond to public input. This is, when effective, an interactive and ongoing process.

The CALFED Bay-Delta Program, if completed, will be the most complex ecosystem restoration

program ever carried out within the United States. It will affect the lives of tens of millions of Californians now and hundreds of millions yet to come in the future.

It will cost billions of dollars and involve the use of significant portions of California's land area to achieve success. This process should involve not only water managers and Federal and state agency personnel, but also the general public whose lives will be affected by a CALFED solution. The solution will be complex and should involve, to the greatest extent possible, as much of the public as is practical.

Notwithstanding the participation of RCRC I have referenced, we believe that there are two very serious problems with the CALFED public participation program and that they are inextricably linked.

It is our experience that the CALFED schedule is too short. It fails to allow time for most of the affected parties to even become acquainted with the information being presented let alone provide meaningful input. While it is true that the process has been underway for over two years, it is only the past six months that clear project features and components of a solution have been assembled in any understandable manner. It is only in the past two months that a Draft Environmental Impact Statement has been released for public review and comment. Unfortunately, during this same time period the California Department of Water Resources released their Water Plan Update (Bulletin 160-98) with an April 15 deadline for comment.

The Bureau of Reclamation set an April 17 deadline for comments on their own 5,000 page Programmatic Environmental Impact Statement. To comply with CVPIA. Most local governments were simply overwhelmed with the paper load. For the general public, faced with earning a living, the invitation to "participate" in these processes on that schedule was quite impossible.

In addition, providing meaningful comments was further frustrated by significant portions of a CALFED solution package being incomplete at this time. For while we now know what the various alternatives for conveyance are, there are missing pieces to the puzzle. For example:

- There is no Assurance package. For our membership the issue of protections and guarantees of performance is of paramount importance.
- There is no Water Transfers package. Water transfers, while an important component of any CALFED solution, pose the most direct threat to our source areas economies if not properly designed and implemented.
- There is no complete Watershed Strategy. At best CALFED has put together a strategy of how to do a watershed strategy. The watershed restoration and management component of a CALFED solution is critically important to our members.
- There is no clear direction on new surface storage. Without new storage of surface water, the chances of producing a CALFED solution that would not negatively affect our members, is very slim.

Therefore we feel that we are being forced to comment on an incomplete CALFED package in an unrealistic time frame. We are not optimistic that our comments would have any influence on the process given the lack of time for CALFED staff to evaluate and incorporate changes. We must underscore that we do not feel meaningful public input can be accommodated in the CALFED

process given it is to be completed in the next seven months. That is a schedule for confrontation not consensus.

We believe that the public involvement in the CALFED process has been structured in such a manner as to make it very difficult for meaningful participation. For example, Mr. Meacher, our BDAC representative has at times received his meeting agenda packet less than 24 hours before a BDAC meeting. He cannot be expected to read, assimilate and provide meaningful suggestions on a two-inch thick document in such a short period of time.

Most CALFED meetings take place in Sacramento. While this is convenient for the agency personnel, most of the interested public are located elsewhere. CALFED's recent regional meetings throughout the state for the Draft Environmental Impact Statement are an improvement. However, they are too little too late.

Regular CALFED regional workshops, on specific subjects, should have been held throughout the solution area, not just in Sacramento. This latter problem has resulted in increasing landowner concerns in our member counties regarding just what it is CALFED is doing and how it will affect their way of life.

The CALFED Ecosystem Restoration Program Plan, a multi-volume plan to restore the environment of the Delta, was mailed out to only 550 recipients—according to CALFED's own mailing list. CALFED's choice of who the document went to was also of concern. In one State Senate District in the Sacramento Valley, only two farm bureaus received copies. No copies were received by Women in Agriculture or by any Chamber of Commerce. However, more than twenty-five copies went out to environmental groups such as the Sierra Club, the Nature Conservancy and Restoring the Earth. Also on the "A" list of recipients were universities which received twenty copies in places as far away as U.C. Riverside and Berkeley. Federal and state agencies obtained over forty copies. Those who stood to be most affected by the plan, those who's land might have been "retired" or those whose water rights might be acquired, or those whose land might be converted to habitat, were left in the dark. Public frustration, expressed to us, the local elected officials, was significant. They have asked us, and we are asking you, to help expand and improve the public participation process in a meaningful way.

The CALFED program has only rarely been able to take the time to address specific concerns of local landowners and examine ways to mitigate specific changes to their program. We believe that this must change.

The CALFED program has only rarely been able to hold "field" meetings with local conservancies, landowners and local government to find innovative ways to restore the environment without new regulations and takings. We believe that this must change.

The CALFED program has seemingly expected rural California to supply the land, water and job sacrifices to fix the Delta without question in the manner of traditional top down agency mandates. We believe that this must change.

CALFED has scheduled its own document releases and review periods in apparent ignorance or oblivion of the actions being taken by other CALFED agencies. We believe that this must change.

CALFED expects all California to step forward to help fix the Delta when it is convenient for CALFED, in a location convenient for CALFED in a manner convenient for CALFED. We believe

that this must change.

One of CALFED's own brochures read, "Ultimately, it is the active participations of the entire public that will help fix the Bay-Delta." That Mr. Chairman, and members of the Committee, we believe will not change.

STATEMENT OF BILL GAINES, DIRECTOR, GOVERNMENT AFFAIRS, CALIFORNIA WATERFOWL ASSOCIATION

Good afternoon. Mr. Chairman and members of the Committee, my name is Bill Gaines, and I am the Director of Government Affairs for the California Waterfowl Association. Thank you for the opportunity to come before you today to discuss the private sector's role in the CALFED Bay/Delta Program.

Historically, the Bay/Delta watershed provided over 4 million acres of naturally occurring wetland habitat for Pacific Flyway waterfowl and other wetland-dependent species. Over the course of the last century, largely due to agricultural conversion, urban expansion, and flood control projects, nearly 95 percent of this once vast wetland base has been lost. Yet, our little remaining habitat must still provide critically important nesting and wintering habitat for nearly 25 percent of our continental waterfowl population, as well as an estimated 50 percent of California's threatened and endangered species.

Recognizing this serious threat to our natural resources, the California Waterfowl Association was established in 1945 with the mission of conserving California's waterfowl, wetlands, and sporting heritage. Over the course of the last half-century, our Association has worked cooperatively with Legislators, State and Federal agencies, other organizations and private landowners to actively seek water supplies for wetlands, and to develop, influence, fund, and implement wetland programs which facilitate the preservation, enhancement, and restoration of California's waterfowl habitat. Today, fifty-three years later, the California Waterfowl Association is largely recognized as the leader in California's wetland and waterfowl conservation effort. As Federal and State agencies, private organizations, landowners, and individuals move forward with the implementation of the CALFED Bay/Delta Program, the California Waterfowl Association has, once again, assumed the role of lead voice for public and private wetland and waterfowl interests.

Due to significant changes in California's natural hydrology, much of our remaining interior wetlands must now be "managed"—artificially irrigated and intensively managed to create marsh conditions. As a result of this very unique condition, the quantity and quality of waterfowl habitat available in California in any given year is largely dependent upon the availability of wetland water supplies. For many years, the lack of a firm water supplies for California's managed Central Valley wetland areas resulted in limited habitat of minimum quality in all but the absolute wettest of water years. In the fall of 1992, a significant positive step was taken toward addressing these critical annual wetland water needs when the Central Valley Project Improvement Act (CVPIA) was passed by Congress and signed into law. By guaranteeing firm annual water supplies to Central Valley public refuges and private wetlands within the Grassland Resource Conservation District, this landmark

legislation marked a critical positive milestone in the California waterfowl conservation effort. But, with still less than 10 percent of our historical habitat remaining, much remains to be done.

The CALFED Bay/Delta Program is a long-term effort to address ecosystem health, water quality, water supply reliability, and levee system integrity in the Bay/Delta watershed. Because the restoration, enhancement, and maintenance of waterfowl habitat throughout much of this watershed also depends upon these areas of concern, properly implemented, the CALFED Bay/Delta Program represents a tremendous opportunity to address the needs of migratory and nesting waterfowl, and the other wetland-dependent species.

Today, I have been asked to provide our Association's view regarding public participation in the CALFED Bay/Delta Program. As a 501(c)3 nonprofit organization representing nearly 13,000 Bay/Delta stakeholders statewide, the California Waterfowl Association also has a significant interest in the private sector's ability to contribute to the CALFED process.

Let me begin to address this question with the statement that, although California's "water wars" and deteriorating ecosystem health are well chronicled, the CALFED Bay/Delta Program is, far and away, the most significant and positive multi-interest effort ever undertaken to address water and environmental concerns in California, or perhaps throughout the nation. The sheer magnitude of this landscape effort results in unintended barriers and natural disincentives to public participation. At times, even those individuals or the representatives of agencies or organizations who are fortunate enough to be able to dedicate "full-time" to this much needed effort struggle to obtain a comprehensive grip on this sweeping Program and its dynamic process. Clearly, providing for a Program which offers ample public participation opportunities, as well as real-time public awareness of its continual progress and potential impacts, is, in itself, a tremendous challenge for the Bay/Delta Program team.

Irregardless of the stumbling blocks associated with assuring full stakeholder participation in such a mammoth program, the California Waterfowl Association believes the CALFED team has made every effort to design a process which facilitates and encourages important public input and returns real-time information flow. Yes, our Association—even as a member of the Program's Ecosystem Restoration Roundtable—has experienced times of serious frustration due to our inability to positively influence CALFED Program decisions. But, our Association does not contribute this frustration to a CALFED agency team set on implementing the Program "their way," but rather to the tremendous difficulty associated with trying to address a myriad of Bay/Delta concerns in a fashion which is palatable to each of the many stakeholder interests which must be served.

In trying to achieve this difficult goal, the California Waterfowl Association believes that CALFED agencies have made every reasonable effort to design a Program which allows Bay/Delta stakeholders to contribute to the Program's implementation, as well as its problem-solving/decision-making process. The ability of the private sector to be heard in this process ranges from the high profile role of formal committees established to provide direct advisory input to CALFED agencies, to hands-on workshops in small rural towns throughout the watershed, to other public outreach efforts which are enough to choke even the hardiest of mailboxes.

As each of you is probably aware, CALFED agencies have tried to facilitate formal public input and interaction by establishing the Bay/Delta Advisory Council, or BDAC. This body, which is

chartered by the Federal Advisory Committee Act, is comprised of a variety of stakeholder interests—including the California Waterfowl Association, water districts and utilities, environmental and fishing organizations, the California Farm Bureau, and others. Combined, this regularly meeting group of more than thirty diverse private interests provides an on-going medium for direct top-level public participation in the Program's decision-making process.

In addition to BDAC; formal stakeholder interaction is also provided by the CALFED Ecosystem Restoration Roundtable—a roughly 20 member BDAC subcommittee. Similar to BDAC, this multi-interest team meets regularly in a public setting to discuss the concerns of individual interest groups, to ensure the coordination of CALFED Program activities with other restoration programs in the Bay/Delta watershed, and to help define priorities for on-the-ground CALFED projects.

In addition to our seat on BDAC, the California Waterfowl Association is also active on the CALFED Ecosystem Restoration Roundtable, and I fill this role. As a direct result of our involvement at the Roundtable level, we have been able to positively influence a small, but important, selection of Program decisions—most notably the addition of waterfowl and their habitats as a secondary priority of the Program.

In addition to the ability of the private sector to influence CALFED policy decisions via BDAC and the Ecosystem Roundtable, the public is also offered an opportunity to direct the Program's biological priorities, and the actual selection of restoration projects. Thirteen species, habitat, and/or region specific technical panels, as well as an umbrella Integration panel, have been created by CALFED agencies. These technical teams—which consist of a mixture of agency, academic, and stakeholder specialists—not only provide input on the types of restoration actions needed to address targeted Program concerns, but also play a lead role on the review and selection of proposals submitted for CALFED funding.

The formal opportunities for private sector input that I have outlined are supplemented by the sometimes seemingly overzealous effort of CALFED agencies to reach out to those organizations, landowners, and individuals who have shown an interest in the Program. In our opinion, a tremendous amount of time, expense and effort has been put forth by the CALFED team to arrange, announce, and attend regional workshops, scoping meetings, and other public outreach efforts, as well as to continually bombard those on the massive mailing list with Program updates and other information. I can assure you that, as one of those on CALFED's ever growing mailing list, delivery of the daily mail can be, at times, a depressing event.

It is important to note that, in addition to the care taken to facilitate private sector participation in CALFED decision-making, other important precautions are included in the proposal selection process to protect against unintended negative impacts to any individual landowner or interest-group. First, and perhaps most importantly, restoration projects are only done on a willing landowner basis.

Clearly, certain specific parcels may, for whatever reason, be identified as critical for a certain habitat type or species. But, no project will be initiated without full, willing landowner participation. Second, efforts are being made to leave land in private ownership by giving preference to permanent conservation easements over fee title acquisition. Finally, the latest Request for Proposal (RFP) includes local-public involvement as part of the formal proposal evaluation criteria.

Nevertheless, regardless of the sweeping efforts to address public concerns in the CALFED Program, the role of the private sector will be forever limited by several unavoidable factors. First, as I mentioned before, due to the staggering sheer size of the effort, few private organizations—much less individuals—have the time or aptitude to become sufficiently knowledgeable on the Program and its process, to know when, where, and how to "weigh-in" to best serve their concerns. Perhaps most frustrating, even those who are fortunate enough to understand the process are limited by the Program's charter to address so many differing concerns while avoiding unwanted impacts to the many diverse stakeholder interests.

I believe the California Waterfowl Association is a good example of a private interest who has a relatively thorough knowledge of the Program, yet has been limited in its ability to fully address each of its concerns. Today, I am here to ask for your help.

Our Association fully appreciates and supports the goal of the CALFED Program to address water supply reliability, and the importance of addressing the habitat needs of listed fish species in achieving this objective. Our "managed" wetlands will also benefit greatly from achieving this goal. Yet, if the Program is to make a sincere effort to restore the integrity of the Bay/Delta ecosystem, it must also more fully consider the serious habitat needs of native wildlife—most notably wintering and nesting waterfowl, and other species which share their habitats.

California's Central Valley—largely the same geographical area being addressed by the CALFED ecosystem restoration program—is widely recognized as one of the most important waterfowl regions in North America. Yet, as I mentioned earlier, this area has suffered the significant loss of over 90 percent of its historical waterfowl habitat—the greatest percentage decline on the continent.

In the mid 1980's, in response to serious reductions in North American waterfowl populations, the North American Waterfowl Management Plan (NAWMP) was signed by the Federal Governments of Canada, the United States, and Mexico. This Plan established broad waterfowl population goals and identified seven priority areas on the North American continent in need of habitat restoration and enhancement. California's Central Valley was one of these identified priority areas.

Two years later, in 1988, a habitat restoration program—in many ways like CALFED—was initiated to address NAWMP objectives in our Central Valley. This public/private conservation effort—known as the Central Valley Habitat Joint Venture—carefully established biologically based acreage objectives for the preservation, enhancement, restoration, and maintenance of waterfowl habitat throughout much of the CALFED project area. Recognizing the importance of private landowner support to the success of the Joint Venture, a serious effort was made to minimize the changes to existing land use necessary to meet waterfowl needs. As such, the quantity of acreage targeted for wetland restoration was somewhat limited, and heavy emphasis was placed upon leaving land in agricultural production and simply working with the landowner to increase its wildlife values.

The tremendous loss of Central Valley habitat, as well as the critical importance of the region to migratory waterfowl is well documented. Clearly, the CALFED Program's ecosystem restoration effort could, and should, play a significant role in this critical conservation effort. Yet, thus far, the best efforts of our Association to elevate waterfowl and their habitats to a high priority of the

CALFED Program have been relatively unsuccessful.

Congress has already recognized the importance of the migratory waterfowl resource through its support of the NAWMP, and its authorization and annual funding of the North American Wetland Conservation Act (NAWCA)—the Plan's Federal funding source. Today, I ask for your assistance in creating a CALFED Program which not only helps to meet these needs, but also facilitates greater landowner support by providing full Federal funding to the CALFED ecosystem restoration effort, and earmarking a reasonable portion of those dollars for projects which are entirely consistent with the expected habitat objectives of the Central Valley Habitat Joint Venture.

In conclusion, the California Waterfowl Association would like to applaud the CALFED team for what, we believe, is a more than reasonable effort to design a Program which maximizes the role of the private sector in the decision-making process. We ask those who may disagree to consider the tremendous difficulty associated with obtaining complete public satisfaction with a program of this size and scope. We also ask Congress to help us fully realize the potential of the CALFED Program to appropriately address the needs of our North American waterfowl populations and other native plant and animal species who share their habitats.

On behalf of the members of the California Waterfowl Association, and waterfowl enthusiasts throughout the North American continent, I thank you for the opportunity to come before you today, and I would be happy to answer any questions you may have at this time.

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Representatives of the Bay-Delta Urban Coalition include the Alameda County Water District, Coachella Valley Water District, Central & West Basin Waters, Central Coast Water Authority, East Bay Municipal Utility District, Metropolitan Water District of Southern California, Municipal Water District of Orange County, San Diego County Water Authority, San Francisco Public Utilities Commission, Santa Clara Valley Water District, and Solano County Water Agency.

[end of transcript]